IDB IICA FONTAGRO

Annual Report 2025

Building the Future of Agri-Food Innovation Together

FONTAGRO

FONTAGRO is a cooperation mechanism administered by the Inter-American Development Bank (IDB), with its own membership, governance structure, and assets. FONTAGRO is internationally recognized for strengthening agri-food and agro-industrial innovation in a sustainable manner through the strategic co-financing of projects that constitute international research, development, and innovation (R&D&I) consortia. Since 2021, FONTAGRO's Technical Administrative Secretariat (TAS) has been located at the Inter-American Institute for Cooperation on Agriculture (IICA), and beginning in 2025, all projects approved by FONTAGRO's Board of Directors (BD) for financing will be implemented through IICA. This publication is a summary of the XXIX Annual Meeting of the FONTAGRO Board of Directors, presenting the results and achievements of the 2025 period.

Credits and Contributions

General Coordination: Eugenia Saini. Collaborators: Technical Administrative Secretariat (TAS). Design and creativity: Adrian Orsetti. Photography and Images: FONTAGRO image bank and others provided by authors and participating institutions with their respective authorization.

Washington D.C., December 2025.

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Technical Administrative Secretariat (TAS)

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Building a shared future of opportunity for agriculture in Latin America and the Caribbean

Sponsors

IDB IICA

Other strategic alliances

Te Kāwanatanga o Aotearoa New Zealand Government

GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASES

Global Methane Hub

BAYER Crop Science

CARDI

CATIE

CGIAR

THE WORLD BANK

Alliance Bioversity & CIAT

Food and Agriculture Organization of the United Nations

cirad

UF UNIVERSITY of FLORIDA

CLEMSON UNIVERSITY

Cornell University

NC STATE UNIVERSITY

THE OHIO STATE UNIVERSITY

WORLD FOOD PRIZE FOUNDATION

Acknowledgments

The FONTAGRO Board of Directors wishes to express its sincere gratitude to Mr. Manuel Otero, Director General of IICA, for his invaluable support throughout this transition process. Special thanks are extended to Mr. Hugo Chavarría Miranda and to the staff of the IICA offices where operations are carried out, as well as to the various IICA departments, including Legal, Finance, Administration, Communication, and Technical Cooperation, for their continued collaboration.

We also acknowledge the support of the Inter-American Development Bank (IDB), particularly the Connectivity, Markets, and Finance Division, led by Mr. Fabrizio Opertti, and the Agriculture and Rural Development Division, with special mention of Mr. Pedro Martel and Ms. Ana Ríos, along with the country specialists who have accompanied the implementation of FONTAGRO projects.

Our appreciation extends as well to the Office of Outreach and Partnerships, led by Mr. Matías Bendersky, and to Mr. David Margolis, Mr. Jianjun Xu, and Ms. Michiko Vilela, as well as to the Grant Management and Co-financing Unit (GCM), for their support of FONTAGRO's operational model and the strengthening of strategic alliances essential for advancing agricultural R&D&I and building capacity in Latin America and the Caribbean. We also recognize the contribution of the Legal Department and the Finance and Investment Department of the IDB, with special mention of Mr. David Merchán, and of the Financial Management and Procurement Services Office for Operations (FMP), whose work has been instrumental in strengthening FONTAGRO's institutional framework.

Finally, the Board expresses its special recognition to the Technical Administrative Secretariat for its extensive work, commitment, and dedication, which have enabled FONTAGRO to maintain its regional leadership in strategic partnerships and in shaping the future of agricultural R&D&I.

About FONTAGRO

FONTAGRO is a unique global mechanism dedicated to the strategic and sustainable co-financing of agricultural research, development, and innovation (R&D&I) in Latin America and the Caribbean (LAC). It also serves as a forum for discussing priority topics in science and innovation for LAC and the rest of the world. It was created with the purpose of increasing the competitiveness of the agri-food sector and reducing poverty through the sustainable management of natural resources.

It is composed of fifteen member countries: Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Spain, Honduras, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic, Uruguay, and Venezuela. These countries are represented by the highest authorities of their national agricultural research and innovation institutes (INIAs), who lead national policies on these topics and make up FONTAGRO's Board of Directors. The Inter-American Development Bank (IDB) and the Inter-American Institute for Cooperation on Agriculture (IICA) are the sponsors of this regional initiative.

FONTAGRO was established in 1998 in response to the decline in agricultural research and development investment observed in previous decades. Its governance structure is composed of the Board of Directors, the Executive Committee, the Financial Committee, and the Technical Administrative Secretariat, headed by an Executive Secretariat. The institutional documents that guide its operations are the Constitutive Agreement, the Operations Manual, and the 2025–2030 Medium-Term Plan (MTP). In addition, annual external audit reports and publications analyzing FONTAGRO's results and impact are produced each year.

Member countries have contributed a total of US$83.05 million in capital, and as of December 31, 2024, the investment portfolio reached US$98.75 million. FONTAGRO's co-financed projects are structured as regional and international platforms composed of at least two member countries, although other non-member countries may also participate by contributing their own funds.

To date, 212 regional research and innovation projects have been co-financed for a total amount of US$156.16 million, of which FONTAGRO contributed US$32.5 million (21%), other agencies US$21.63 million (14%), and participating institutions, as counterpart funding, US$102.5 million (66%). Consequently, for every dollar invested by FONTAGRO between 1998 and 2025, more than three dollars have been leveraged from other organizations. These operations span 35 countries and involve nearly 2,000 public and private institutions, including national research institutes, universities, companies, non-governmental organizations, and regional and international bodies.

FONTAGRO promotes and develops strategic partnerships in science, technology, and innovation with regional and international partners from both the public and private sectors. Through this approach, it has consolidated a unique organizational and institutional model based on the convergence and inclusion of multiple actors in agricultural and food research, innovation, and development.

Outcome and impact studies have shown significant achievements, not only in technical terms but also in network creation, spillovers and spin-offs, and in strengthening capacities across value chains. Approximately 77% of FONTAGRO project results contribute to the scientific knowledge base of national agricultural research systems, 69% are being used by final beneficiaries, and 74% constitute regional public goods.

In recent years, FONTAGRO has established itself as a key co-financing mechanism for science and innovation in Latin America and the Caribbean, generating public goods with international reach and reaffirming its strategic role on the global stage.

To date, 212 regional research and innovation projects have been co-financed for a total amount of US$ 156.16 million, of which FONTAGRO has contributed US$ 32.5 million (21%), other agencies US$ 21.63 million (14%) and the participating institutions, as a counterpart, US$ 102.5 million (66%).

Challenges and opportunities of the decade for the LAC region

Based on projections to 2034 (OECD–FAO Agricultural Outlook)

Global trends reshaping demand and production

+13% **increase in food demand** with persistent nutrition gaps in proteins and micronutrients.

+14% **growth in global production under sustainable models** driven by technology, biotechnology, and precision agriculture.

22% **of calories consumed will cross borders** reflecting deepening global food interdependence.

Multilateral cooperation and trade agreements will be essential.

LAC as a global agri-food engine

- **Comparative advantages** in natural resources and knowledge that allow the region to close productivity gaps.
- **Technological momentum** positioning LAC as a global provider of technological solutions (biotech, digitalization, bioeconomy).
- **Growing share of global exports** of raw materials, food, and biomaterials.

Strategic pathways for regional leadership

Agricultural production growth

16% increase positions LAC as net supplier of food and biomaterials.

Strength in knowledge and technology

Greater capacity to generate sustainable solutions.

Productivity and innovation as drivers

Digital, biotechnological, and precision technologies will shape a new era of knowledge management.

Need for diversification

Greater added value to reduce production and price risks.

Diverse region, diverse challenges

Climate vulnerability, infrastructure gaps, and R&D&I barriers persist, requiring context-specific solutions.

LAC has the opportunity to build public–private innovation systems with FONTAGRO. Its network of 15 countries provides a unique platform where cooperation is transformed into research, development, and innovation with tangible impact.

FONTAGRO is a **unique co-financing mechanism** for open innovation ecosystems serving the agri-food systems of Latin America, the Caribbean, and Spain. It operates as an investment fund.

15 member countries

- Argentina
- Bolivia
- Chile
- Costa Rica
- Colombia
- Ecuador
- Spain
- Honduras
- Nicaragua
- Panama
- Paraguay
- Peru
- Dominican Republic
- Uruguay
- Venezuela

Since 1998, investment in

212 regional research projects.

Totaling US$ 156.2 million, while maintaining its capital at **US$ 100 million.**

Business model: The accumulated returns from the capital are used to finance non-reimbursable R&D&I activities, leveraging both cash and in-kind resources from other organizations.

Where **We Work**

35
Beneficiaries countries

~150
Million invested

+212
Innovation laboratories

+300,000
Beneficiaries reached

- National Institutions
- Regional Universities
- International Institutions
- Regional Institutions
- Regional Governments
- Non-Governmental Organizations
- Producer Associations
- Private Companies
- Extra-regional Universities

Letter from the **President**

Dear Members of the Board of Directors,

I am pleased to present the main results and highlights from the first half of 2025.

From a financial perspective, the Fund reached a value of US$99.91 million as of December 31, 2024, representing a 2.6% increase over the previous year, driven by improved valuation of financial assets and accrued interest. By June 30, 2025, total assets amounted to US$102.7 million, and by August 31 they had reached US$103.8 million, reflecting a 5.16% increase compared to December 2024. Payment commitments rose by 30%, reflecting greater project approvals.

Since 1998, FONTAGRO has co-financed 212 regional projects totaling US$156.2 million, with contributions from the Fund amounting to US$32 million (21%), cooperating agencies US$21.6 million (14%), and institutional counterpart funds US$102.5 million (66%). The current portfolio includes 58 operations totaling US$12.89 million (with an overall investment of US$42.5 million), cumulative disbursements of US$6.5 million, and annual disbursements of US$1.72 million. Technical supervision has been strengthened to ensure the delivery of high-quality products, and progress has been made in the development of seed funds and jointly agreed projects.

In terms of programmatic activities, the regular call for proposals on the sustainability of agri-food systems was launched, receiving 55 submissions, of which 20 scored above 75 points. In addition, the Case Competition on Bioentrepreneurship was implemented in partnership with IICA, along with new initiatives for seed funds and joint projects.

In knowledge management and communication, 1,054 products were generated (including publications, webstories, blogs, newsletters, videos, webinars, and scientific articles), representing a 30% increase on social media, with a total of 17,464 accumulated followers. A total of 137 final project products were reviewed, and three virtual and one in-person workshop on scientific writing and strategic communication were held.

Regarding partnerships, significant progress was achieved with organizations from the United States, Brazil (EMBRAPA), the private sector (Corteva, Bayer), New Zealand (MPI), the Global Research Alliance, the Global Methane Hub, and multilateral banks (IDB, World Bank, CAF). Follow-up was also conducted on approved MOUs, and efforts continued to regularize pending contributions from some member countries.

Finally, it is important to recall that the tripartite agreement between the IDB, IICA, and FONTAGRO expires on February 28, 2026, and the Administration Agreement with the IDB on June 30, 2029. It will be necessary to review and modernize the operational model to strengthen technical, legal, administrative, and financial synergies in line with the renewal of these agreements.

These achievements reaffirm FONTAGRO's institutional strength and its relevance as a regional cooperation platform. I wish to thank the Board of Directors, the Vice President, the Executive Secretary, and the staff of the Technical Administrative Secretariat for their support and commitment to our shared mission and this year's accomplishments.

Nicolás Bronzovich

President
FONTAGRO

President of INTA
ARGENTINA

Message from **Executive Committee**

We are pleased to present FONTAGRO's 2025 Annual Report, which reflects the progress achieved and the continued commitment of all members of our scientific, technical, and institutional community. This year has been particularly significant, marked by the completion of the 2020–2025 Medium-Term Plan and the definition of a new strategic vision that will guide our work toward 2030.

Throughout 2025, we reaffirmed our conviction that science, innovation, and international cooperation are essential pillars for addressing the global challenges facing agri-food systems: climate change, environmental sustainability, technological transformation, and food security. Guided by this principle, FONTAGRO has strengthened its role as a regional platform of reference, promoting evidence-based solutions and fostering collaboration among governments, research centers, universities, international organizations, and the private sector.

This year, we consolidated an active project portfolio exceeding US$50 million in co-financing, generating tangible impacts on productivity, climate resilience, and the sustainability of agri-food value chains. At the same time, we advanced the design of the new 2025–2030 Medium-Term Plan, structured around six Flagship Programs that will guide future investments in areas such as crop and livestock transformation, digitalization and artificial intelligence, extension and scaling services, the future of the food basket, and evidence-based policies.

The year 2025 was also notable for the expansion of strategic partnerships with new international allies, the incorporation of new financial instruments and institutional innovations, and FONTAGRO's active participation in global forums on science, technological development, and innovation. These efforts reaffirm our commitment to a more productive, competitive, and low-emission agriculture.

We extend our sincere appreciation to the Board of Directors, our sponsors the IDB and IICA, member institutions, and the hundreds of researchers and producers whose work makes it possible for FONTAGRO to remain a driving force for regional transformation. Their commitment, creativity, and perseverance are the foundation of our achievements.

Looking ahead, we embrace with enthusiasm the challenges of this new stage. FONTAGRO will continue to promote stronger, more open, and results-oriented regional cooperation, strengthening the scientific and technological capacity of our countries and contributing actively to the sustainable development of Latin America and the Caribbean.

Executive Committee of FONTAGRO

FONTAGRO Executive Committee

Nicolás Bronzovich
President
FONTAGRO

President of INTA
ARGENTINA

Jorge Ganoza
Vice President
FONTAGRO

Executive President of
INIA PERU

Eugenia Saini
Executive Secretary
FONTAGRO

Main **Results 2025**

The audited financial report as of December 31, 2024, recorded a fund value of US$99.91 million, representing a 2.6% increase compared to the end of 2023 (US$97.42 million). This positive variation is mainly explained by improved valuation of financial assets at year-end and accrued interest. Payment commitments also increased by 30%, reflecting a higher level of project approvals. As of June 30, 2025, total assets reached US$102.7 million, confirming a trend of sustained growth and sound financial management.

The investment portfolio as of August 31, 2025, totaled US$103.8 million, an increase of 1.96% compared to June 2025 and 5.16% compared to December 2024. These variations are mainly due to changes in the market valuation of bonds within the investment portfolio, in a context of gradual adjustment of international interest rates.

Since its creation in 1998, FONTAGRO has co-financed 212 regional projects for a total of US$156.2 million, of which US$32.0 million (21%) came from FONTAGRO, US$21.6 million (14%) from other agencies, and US$102.5 million (66%) from counterpart contributions by participating institutions. In terms of administration and monitoring, the current portfolio includes 58 active operations amounting to US$12.89 million, representing a total investment of US$42.5 million. Cumulative disbursements reached US$6.5 million, while in 2025 disbursements totaled US$1.72 million. A remaining US$6.16 million is pending execution through 2030 (the difference of US$219,734 corresponds to projects required to return funds). During the year, support was provided for coordinating seed fund and jointly agreed project meetings, as well as intensive technical supervision to ensure the delivery of high-quality outputs and compliance with commitments.

Programmatic activities were carried out according to the annual schedule. Among the most notable was the regular call for proposals, “Driving Sustainability in Agri-Food Systems in Latin America and the Caribbean: Technologies and Innovations with Strong On-the-Ground Impact to Improve Efficiency and Resilience and Reduce Environmental Footprint.” A total of 55 proposals were received, of which 20 scored above 75 out of 100; the results are presented in Annex III. Likewise, the Case Competition on Bioentrepreneurship, authorized by the Board of Directors during the XXVIII Annual Meeting in 2024 (Item 5, paragraph iv), is being implemented in coordination with IICA, and its progress is detailed in Annex IV. During the reporting period, support was also provided for the design of seed funds, jointly agreed projects, and other initiatives, as described under Item I of this report.

In terms of knowledge management, communication, and dissemination of results, a total of 1,064 products were generated, including publications, scientific articles, videos, webinars, newsletters, institutional series, and other digital materials. Institutional platforms reached 17,464 followers, reflecting a 30% increase on social media. The Technical Administrative Secretariat (TAS) provided technical assistance to projects by reviewing 137 final reports and products through periodic virtual meetings and organized both in-person and virtual workshops focused on project design and scientific writing.

With regard to alliances and memberships, the TAS and the Executive Committee promoted actions aimed at strengthening international cooperation and FONTAGRO’s institutional visibility, achieving significant progress with international organizations, the private sector, foundations, and multilateral banks. Follow-up was carried out on the Memoranda of Understanding (MOUs) approved during the XXVIII Annual Meeting, and member countries Nicaragua, Paraguay, and Uruguay were reminded of the need to complete their pending capital contributions.

Finally, the Board of Directors is reminded that the Tripartite Agreement between the IDB, IICA, and FONTAGRO expires in February 2026, while the Administration Agreement with the IDB expires in June 2029. In this context, it is recommended to review the operational model to correct duplications between systems, enhance synergies and efficiency, and establish the necessary addenda to accompany the renewal of both agreements.

Results

Leverage

2011-2017: **2.68**
2018-2025: **3.46**

Percentage increase in fund mobilization

FONTAGRO: **31%**
Other Agencies: **88%**
Counterpart Contribution: **68%**

Total: 59%

Execution VS. Audit

Jun 2024
Execution: **39**
Audit: **9**

Oct 2025
Execution: **53**
Audit: **5**

Percentage composition of FONTAGRO co-financing, 1998–2025

FONTAGRO: **23%**
Other Agencies: **15%**
Counterpart Contribution: **65%**

in 2024/2025

56
scientific articles in international journals

407
citations in Google Scholar

Operations 2025

Southern Cone: **27**
Andean Region: **20**
Central America: **7**
TAS: **3**
Spain: **1**

Evolution of **FONTAGRO's** financing

Results 2018-2025

FONTAGRO Funds:
US$ 12.36 M
(+31% vs. 2011-2017)

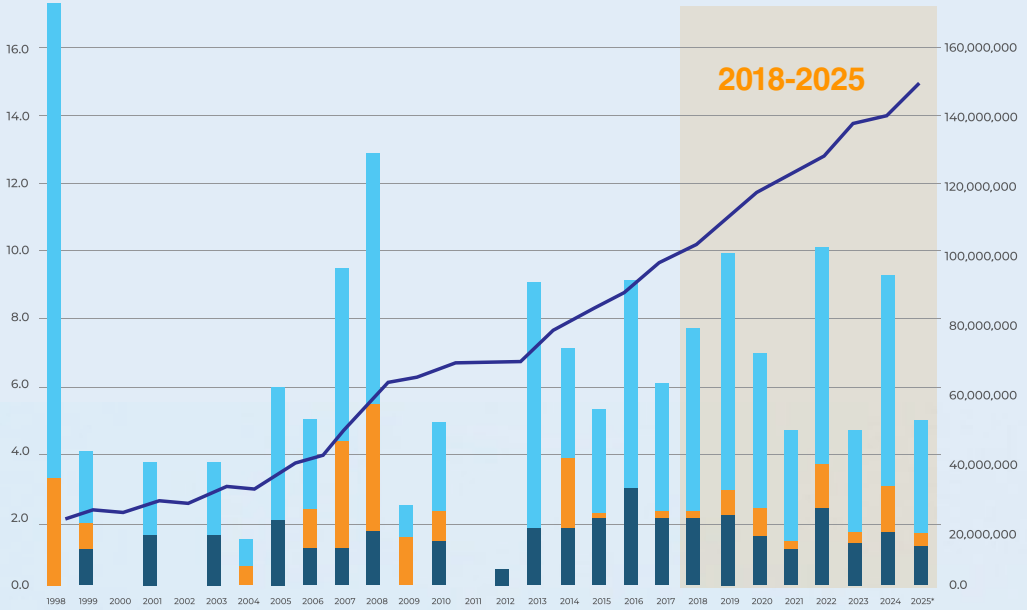
Funds from Other Agencies:
US$ 4.86 M (+88%)

Counterpart Funds:
US$ 37.97 M (+68%)

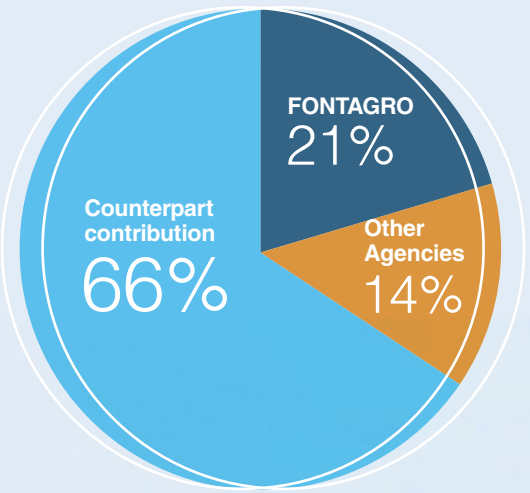
Total Funds:
US$ 55.02 M (+59%)

Leverage:
3.46 : 1

Evolution of FONTAGRO co-financing, 1998–2025 (in millions of dollars)



Distribution of FONTAGRO financing, 1998–2025



Our **Identity**

Medium-Term Plan (MTP) 2025-2030

#1 Vision

To transform agri-food systems through knowledge so that they become more inclusive and environmentally and socially sustainable.

#2 Mission

To lead regional coordination, cooperation, and dialogue through the sustainable co-financing of public-good initiatives that contribute to the knowledge and innovation of agri-food systems and to improving people's quality of life.

#3 Values

Integrity, Solidarity, Effectiveness, Transparency, and Respect.

#1 Transformation of resilient and carbon-neutral crop systems.

#2 Transformation of livestock and animal protein systems: productive efficiency with a lower environmental footprint.

#3 Impact 2030: effective scaling of R&D&I through new models of extension, technology transfer, and public-private partnerships.

#4 Digital revolution in agriculture: robotics and artificial intelligence for regional innovation.

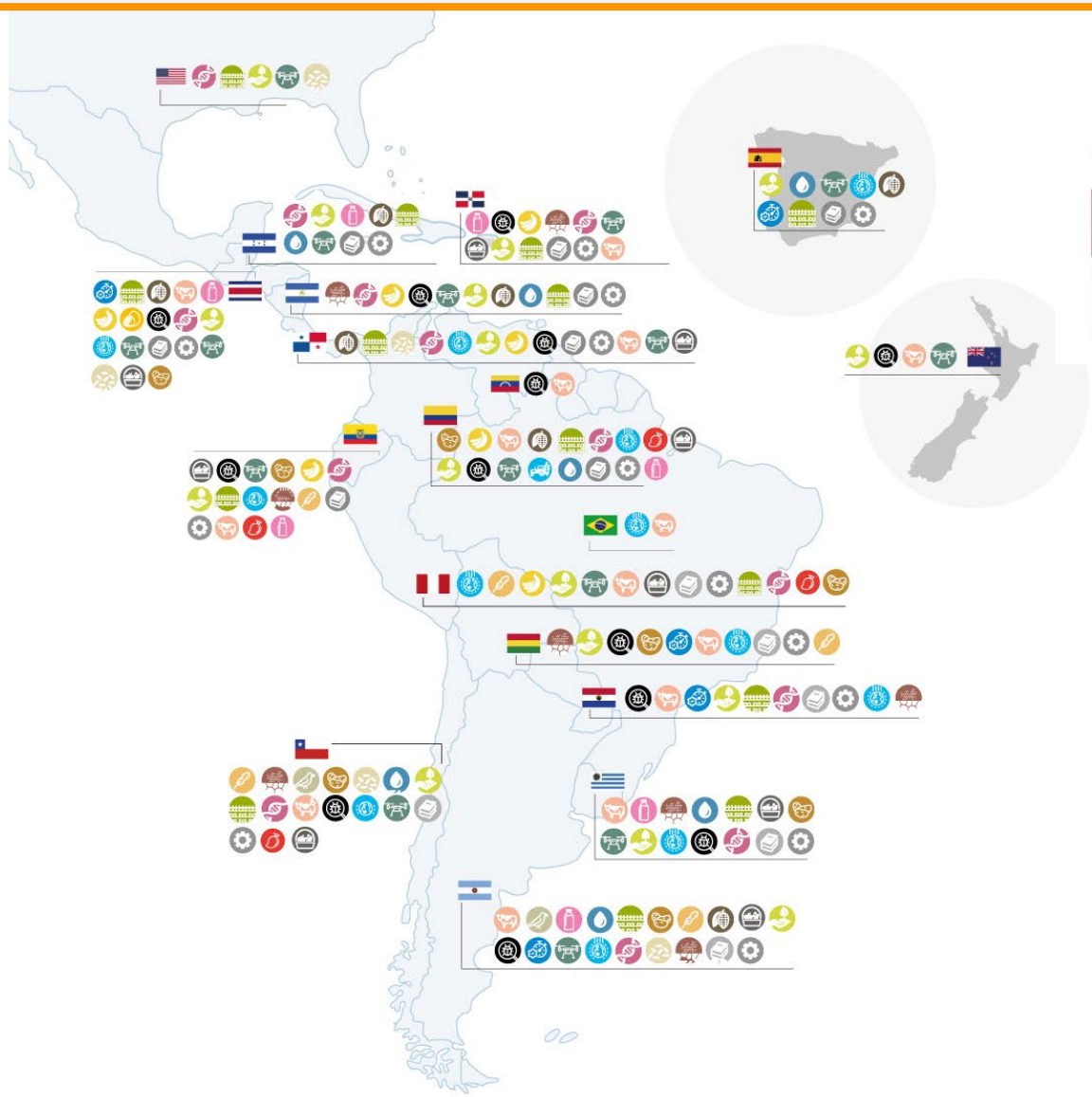
#5 The Future Food Basket: diversification and biodiversity use for sustainable nutrition.

#6 Science for evidence-based policy design.

FONTAGRO Innovation Labs
in the region

1. **Carbon gaps and service crops**
   IICA/FAUBA Argentina
2. **Climate resilience of the quinoa agri-food system**
   IICA/INIAF Bolivia
3. **Sustainable, resilient, and participatory fruit agroecosystems assisted by AgTech 5.0**
   IICA/AGROSAVIA Colombia
4. **PHB: use and adoption of biologicals**
   AGROSAVIA Colombia
5. **EcoMaize: technological solutions for maize stunting**
   AGROSAVIA Colombia
6. **Restoration of soil organic carbon: contribution of no-tillage systems**
   ArgenINTA Argentina
7. **Sustainable livestock for the development of the Gran Chaco**
   ArgenINTA Argentina
8. **Regional platform to strengthen the competitiveness of Andean avocado**
   IICA/INIA Peru
9. **Sustainable management of creole cattle genetic resources**
   IICA/AGROSAVIA Colombia
10. **Regional network of farms and public–private platform for regenerative agriculture**
    ArgenINTA Argentina
11. **Strengthening the competitiveness of soybean in the Americas**
    ArgenINTA Argentina
12. **Integration of productive systems as a strategy for climate change mitigation and adaptation**
    ARGENINTA
13. **Sustainable intensification of production in Central America**
    IICA/INTA Costa Rica
14. **Scaling innovation in pastoral systems**
    INIA Uruguay
15. **Reducing greenhouse gas emissions in potato-pasture systems in Ecuador and Peru**
    IICA/INIAP Ecuador
16. **Climate-resilient wheat**
    UN LLEIDA Spain
17. **Potato purple top complex in the Andean Region**
    IICA/INIAP Ecuador
18. **Development and use of biologicals**
    IIC/INTA Costa Rica
19. **Resilient native potatoes**
    IICA/UMSA Bolivia
20. **Use, production and trade of seed potatoes in Latin America and the Caribbean**
    ARGENINTA
21. **Regional network for genetic improvement in LAC**
    IICA/INTA Costa Rica
22. **FONTAGRO Annual Operating Plan 2025-2028**
    STA FONTAGRO
23. **Maximizing mango use in Colombia and Peru**
    UT Colombia
24. **Multifunctional bio-protectors for postharvest fruits**
    UTN Ecuador
25. **Multifunctional landscapes in extensive agroecosystems**
    CEUTA Uruguay
26. **Sustainable tropical dairy systems**
    IICA/UNICAUCA Colombia
27. **Climate-smart research and indigenous communities (FTG)**
    ARGENINTA Argentina
28. **Climate-smart research and indigenous communities (MPI-NZ)**
    ARGENINTA Argentina
29. **Optimizing nitrogen use for sustainable farming (MPI-NZ)**
    INIA Chile
30. **Optimizing nitrogen use for sustainable farming (FTG)**
    INIA Chile
31. **FONTAGRO Seed Fund**
    Regional
32. **Online crop management support platform**
    IICA/UACH Chile
33. **Network of resilient farms with sustainable forest management**
    ARGENINTA Argentina
34. **Tropical Agriculture 4.0: efficient water management**
    AGROSAVIA Colombia
35. **One Welfare for resilience of livestock production**
    ARGENINTA Argentina
36. **Innovations for reduced methane emissions in ruminants**
    AGROSAVIA Colombia
37. **Expanding the use of biologicals in Latin American agriculture**
    CEAZA Chile
38. **Leveraging biological products to build climate resilience**
    AGROSAVIA Colombia
39. **Sustainable livestock farming in the Amazon of Peru and Ecuador**
    IICA/UNALM Peru
40. **Satellite methane monitoring in rice growing regions of Latin America**
    IICA/INIA Uruguay
41. **Vertical Farming: Horticultural innovation for Latin America and the Caribbean**
    IICA/IDIAP Panama
42. **Implementation of the Knowledge and Communication Management Plan 2020-2025 of FONTAGRO**
    STA FONTAGRO
43. **Regional alliances for iron-rich beans in Latin American countries**
    IICA/IDIAP Panama
44. **Multipurpose silvopastoral systems and family farming**
    AGROSAVIA Colombia
45. **Satellite monitoring of quantity and quality of available biomass in pastoral livestock systems (FTG)**
    INTA / Fundación ArgenINTA Argentina
46. **Satellite monitoring of quantity and quality of available biomass in pastoral livestock systems (MPI-NZ)**
    INTA / Fundación ArgenINTA Argentina
47. **Sustainable management of irrigation and fertilization in quinoa**
    IICA/FAUBA Argentina
48. **Geographical indications for Mesoamerican cacao**
    IICA/UNC Costa Rica
49. **Climate change-resilient potatoes**
    IICA/AGROSAVIA Colombia
50. **Nanotechnology in agricultural soil moisture management**
    IICA/PROINPA Bolivia
51. **Nanofertilizers in soils and nitrous oxide emissions**
    IICA/UIS Colombia
52. **Bioprocess for reducing the solubility of rhizospheric cadmium**
    IICA/UTM Ecuador
53. **Greater agricultural production with lower nitrous oxide emission**
    INTA Argentina
54. **Soil-based carbon sequestration opportunities in Latin America and the Caribbean (MPI-NZ)**
    INIA Uruguay
55. **Soil-based carbon sequestration opportunities in Latin America and the Caribbean (FTG)**
    INIA Uruguay
56. **Gene editing for improvement in plant and animal species**
    INTA Argentina
57. **Prevention and management of Fusarium wilt**
    AGROSAVIA Colombia
58. **More productive and sustainable rice for Latin America**
    INIA Chile
59. **Scaling continuous improvement in family organic export banana**
    IDIAF Dominican Republic
60. **Agricultural water management platform 2030**
    INIA Chile
61. **AgTech for climate-smart dairy farming**
    INTA Argentina
62. **Agroecological model for avian coccidiosis**
    INTA Argentina

FONTAGRO Projects: Sectors and Cross-Cutting Topics



SUSTAINABLE DEVELOPMENT GOALS

SECTOR

- TUBERS AND ROOTS
- KNOWLEDGE MANAGEMENT & COMMUNICATION
- CROPS
- POULTRY
- FRUITS
- LIVESTOCK
- ADDED-VALUE CROPS
- SOIL & WATER
- QUINOA
- RICE
- WATER
- BANANA
- DAIRY

TOPIC

- CLIMATE CHANGE AND SUSTAINABLE INTENSIFICATION
- PEST AND DISEASE MANAGEMENT
- CROP AND LIVESTOCK GENETIC IMPROVEMENT
- AGRIFOOD VALUE CHAIN AND MARKETS
- DIGITAL AGRICULTURE & PRODUCTIVITY
- KNOWLEDGE MANAGEMENT & COMMUNICATION
- SOSTENIBLE
- PRODUCTIVITY

The Inter-American Institute for Cooperation on Agriculture (IICA) has established itself as a strategic and indispensable partner for FONTAGRO, strengthening its impact in promoting science, technology, and innovation across Latin America and the Caribbean (LAC). This partnership has been key to the implementation of 32 regional and international projects, representing an investment of US$ 23,059,213 million aimed at transforming the region's agri-food systems.

Through this collaborative effort, FONTAGRO and IICA have promoted evidence-based policies and innovative technological solutions addressing challenges related to food security, environmental sustainability, and social inclusion, making a significant contribution to the sustainable and resilient development of LAC. Some of these projects include:

1. Nanofertilizers in soils and nitrous oxide emissions
2. Bioprocess for reducing the solubility of rhizospheric cadmium
3. Regional alliances for iron-rich beans in Latin American countries
4. FONTAGRO Seed Fund
5. Satellite methane monitoring in rice growing regions of Latin America
6. Implementation of the Knowledge and Communication Management Plan 2020-2025 of FONTAGRO
7. Sustainable management of irrigation and fertilization in quinoa
8. Geographical indications for Mesoamerican cacao
9. Climate change-resilient potatoes
10. Nanotechnology in agricultural soil moisture management
11. Online crop management support platform
12. Vertical Farming: Horticultural innovation for Latin America and the Caribbean
13. Sustainable livestock farming in the Amazon of Peru and Ecuador
14. Sustainable tropical dairy systems
15. FONTAGRO Annual Operating Plan 2025-2028
16. Development and use of biologicals
17. Sustainable intensification of production in Central America








18. Regional network for genetic improvement in LAC

19. Potato purple top complex in the Andean Region

20. Reducing greenhouse gas emissions in potato-pasture systems in Ecuador and Peru

21. Resilient native potatoes

22. Carbon gaps and service crops

23. Climate resilience of the quinoa agri-food system

24. Innovation and nature for water management

25. Biologicals: Evidence for their adoption

26. Resilient Maize: Innovation and sustainable management of stunting

27. Restoration of soil organic carbon: contribution of no-tillage systems

28. Sustainable livestock for the development of the Gran Chaco

29. Regional platform to strengthen the competitiveness of Andean avocado

30. Sustainable management of creole cattle genetic resources as a contribution to climate-responsible livestock production

31. Public–private alliance to scale regenerative agriculture in the Southern Cone

32. Regional network for cultivar evaluation, reduction of productivity gaps, and innovation transfer (RECSO-Americas)

IICA FONTAGRO

32 regional and international projects, that representing an investment of **US$ 23,059,213 million** aimed at transforming the region's agri-food systems.

Programmatic **Activities**

2025 Call for Proposals

Seven projects were approved for a total of **US$1.5 million**, of which **US$1.15 million** came from FONTAGRO and **US$350,000** were mobilized from the IDB and the Global Methane Hub.

Strategic Dialogues for the Future

This workshop, organized by FONTAGRO, the University of Florida, and the Inter-American Institute for Cooperation on Agriculture (IICA), was held at the University of Florida in Gainesville from May 13-15, 2025. It brought together more than **80 leaders, academics, researchers, businesspeople, directors of agricultural research institutes** from 15 FONTAGRO member countries, and leaders from the United States. The workshop successfully shared knowledge, facilitated the exchange of ideas, and proposed joint actions for the short, medium, and long term.

XX FONTAGRO Annual Technical Follow-up Workshop

Researchers from the region presented the progress of 24 projects that have received a total of US$21.1 million in co-financing. These projects span 18 countries and involve the collaboration of 122 organizations dedicated to developing innovative R&D solutions to strengthen agri-food systems.

FONTAGRO Knowledge Management and Communication Course

XXIX Annual Meeting of the Board of Directors

LATAM 2025 Impact AgriBioentrepreneurship

From October 7 to 9, Rosario, Argentina, hosted the Regional Dialogue on the Future of Financing for Innovation and Technological Development in Agriculture in Latin America and the Caribbean (LAC), as well as the XXIX Annual Meeting of the Board of Directors of FONTAGRO.

2025 Webinars Serie

Projects by Consensus

1. Regional network for cultivar evaluation, reduction of productivity gaps, and innovation transfer (RECSO-Americas)(Argentina, Colombia, Paraguay, Peru and Uruguay), with support from the University of Florida and Corteva Agriscience.
2. Public–private alliance to scale regenerative agriculture in the Southern Cone (Argentina and Paraguay) with support from Bayer Crop Science, AAPRESID, Chile, Peru, IICA.
3. Regional platform to strengthen the competitiveness of Andean avocado (Bolivia, Peru, Colombia, Ecuador) with the support of IICA.
4. Sustainable management of creole cattle genetic resources as a contribution to climate-responsible livestock production (Colombia, Panama, Peru, and Venezuela), with support from AgResearch and Massey University (New Zealand).

Administration and Finances

Status of contributions. The ordinary capital amounts to US$83.05 million, made up of contributions from the Southern Cone (36%), the Andean Region (33%), Spain (18%), and Central America and the Caribbean (14%).

Audited financial statements as of December 31, 2024, show a 2.6% increase in asset value compared to 2023.

Leverage of funds by member country

Member Country	Commitment	Contribution (C)	Pending	Total Financing	FONTAGRO (A)	Other Agencies (B)	Counterpart Contribution	Participated	Led	Leverage ((A+B+C)*1/000)
Argentina	20,000	20,000	-	23,109,126	4,243,247	1,820,222	17,045,657	81	31	0.30
Bolivia	2,500	2,500	-	5,919,496	1,378,054	800,139	3,741,303	36	6	0.87
Chile	2,500	2,500	-	11,157,353	2,475,033	1,353,232	7,329,088	59	19	1.53
Colombia	10,000	10,000	-	26,342,692	5,165,962	3,818,017	17,358,713	91	39	0.90
Costa Rica	681	681	-	13,006,320	2,627,740	2,448,513	7,930,067	67	20	7.45
Ecuador	2,500	2,500	-	8,068,509	1,936,589	725,461	5,406,459	50	8	1.06
Spain	14,723	14,723	-	2,480,652	711,893		1,768,759	20	3	0.05
Honduras	2,500	2,500	-	2,751,979	628,734	390,704	1,732,541	28	1	0.41
Nicaragua	2,500	1,000	1,500	4,660,078	1,201,883	636,706	2,821,489	37	3	1.84
Panama	5,000	5,000	-	5,855,731	1,040,762	719,684	4,095,285	44	8	0.35
Paraguay	2,500	2,000	500	2,149,220	306,399	192,480	1,650,341	23	-	0.25
Peru	2,500	2,500	-	11,629,184	2,063,318	2,279,174	7,286,692	51	10	1.74
Dominican Republic	2,500	2,500	-	3,539,097	677,064	584,841	2,277,192	37	2	0.50
Uruguay	5,000	2,500	2,500	12,500,782	2,845,929	1,299,114	8,355,739	58	18	1.66
Venezuela	12,000	12,000	-	3,302,952	608,414	468,333	2,226,205	29	2	0.09
IDRC	100	146								
Total	87,504	83,050	4,454	136,473,171	27,911,021	17,536,620	91,025,530			0,55

- The economic benefit by country was measured using the economic leverage indicator (the ratio between total mobilized resources and direct contributions).
- C**osta Rica** achieved the highest return (US$7.45 per dollar), followed by **Nicaragua** (1.84), **Peru** (1.74), **Uruguay** (1.66), **Chile** (1.53), and **Ecuador** (1.06). Other countries such as **Argentina** (0.30), **Paraguay** (0.25), **Venezuela** (0.09), and **Spain** (0.05) showed lower returns.
- There was heterogeneity between the number of projects executed and the resulting economic benefits: countries with high participation (Colombia, Argentina, Chile) did not always show high returns, while others with moderate contributions (Costa Rica, Nicaragua) demonstrated greater efficiency in converting their contributions into benefits.

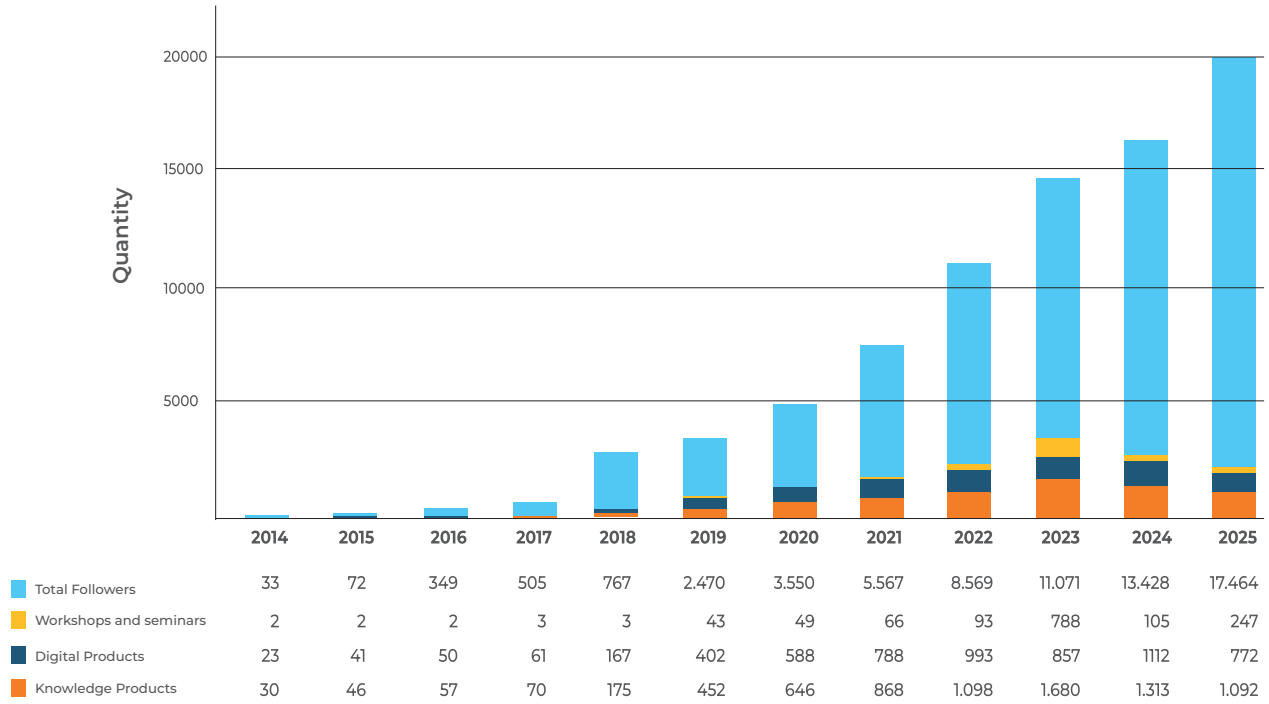
Partnerships and Memberships

Strategic partnerships sought to complement both financial and non-financial efforts, avoiding duplication and enhancing the regional impact of cooperation.

In 2025, collaboration with the IDB was strengthened, and progress was made in consolidating the partnerships approved by the Board of Directors. Memoranda of Understanding (MOUs) were consolidated as key instruments to formalize cooperation commitments and enable actions by the Executive Secretariat. Agreements were renewed with **EMBRAPA** and the **Alliance of Bioversity International and CIAT**, reinforcing technical and scientific cooperation.

New MOUs were signed with four U.S. universities: **the University of Florida, North Carolina State University, Clemson University, and Ohio State University, as well as with CARDI, Bayer Crop Science, CIRAD, and the World Food Prize Foundation**.

Knowledge Management and **Communication**



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Followers	33	72	349	505	767	2.470	3.550	5.567	8.569	11.071	13.428	17.464
Workshops and seminars	2	2	2	3	3	43	49	66	93	788	105	247
Digital Products	23	41	50	61	167	402	588	788	993	857	1112	772
Knowledge Products	30	46	57	70	175	452	646	868	1.098	1.680	1.313	1.092

Thanks to the coordinated and strategic work of the technical and communications team at the Technical and Administrative Secretariat (STA) of FONTAGRO, the institutional visibility and international reach of its projects have been significantly strengthened. This evolution has allowed for the consolidation of a more robust, dynamic, and results-oriented digital ecosystem, promoting more effective interaction with key audiences and relevant stakeholders in the agri-food and scientific sectors globally.

As a result, the knowledge generated by initiatives supported by FONTAGRO has been disseminated more broadly, systematically, and accessibly, ensuring that scientific, technological, and innovation advances reach researchers, collaborating institutions, multilateral organizations, decision-makers, and farming communities efficiently.

This strengthened positioning not only contributes to increasing the regional impact of the projects but also to deepening relationships with strategic stakeholders, promoting greater cooperation, exchange of experiences, and active participation in international science, technology, and innovation networks for the sustainable development of agriculture in Latin America and the Caribbean.

Main **Results 2025**

1,054 Knowledge Products

+31% Social media (Compared to 2024)

- **56** institutional publications
- **84** webstories / success stories
- **14** blogs
- **20** newsletters (monthly and special editions)
- **200** content capsules
- **38** videos
- **21** webinars
- **8** landing pages
- **29** scientific articles, **126** new articles, **6** digital platforms, **137** technical notes from active projects, **90** FONTAGRO in Brief, **32** FONTAGRO Techs, **3** databases, and other digital dissemination products.
- **236** workshops and seminars were organized by the TAS and FONTAGRO projects.

- Total followers across all platforms: **17,464**
- LinkedIn: growth of 2,477 new followers achieved through organic content (without advertising).
- YouTube: **+700** new susbcribers.
- Instagram: **+500** new subscribers.
- X (ex Twitter): **+50** new subscribers.
- Total social media impressions: **342,525**.
- YouTube impressions: **331,300**.
- YouTube views: **36,800**.
- YouTube channel: **1,959** followers (60% increased).

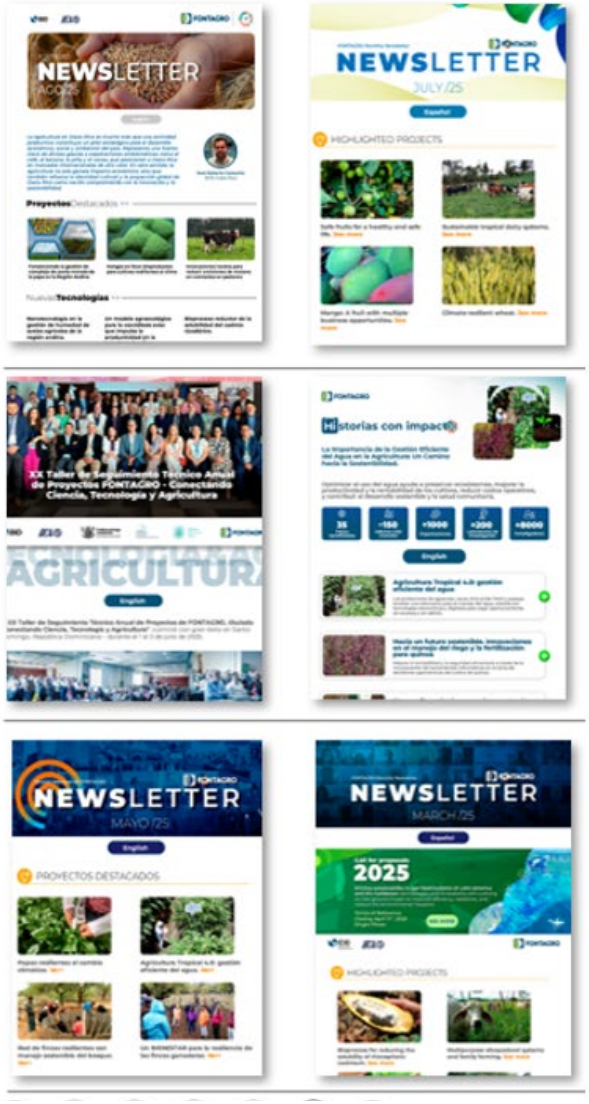
Other highlights:

- Webinar streaming
  Social Media creativity campaigns:
- 2025 Call for proposals
- MTP 2025-2030, University of Florida, Gainesville
- FONTAGRO XX Technical Annual Follow-up Workshop
- Researchers cultivating science
- Science Voices

Newsletters, YouTube Platform, webstories

47,143 Subscribers

Monthly and Special Edition Newsletters



VIDEOS

XX Taller de Seguimiento Técnico Anual de FONTAGRO: Conectando...

139 vistas • hace 5 meses

Taller sobre aprovechamiento de bioproductos para fortalecer la...

213 vistas • hace 6 meses

Reimagining Agri-Food R&D (ENG)

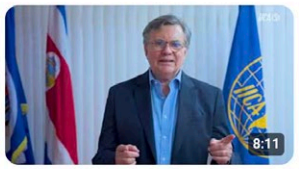
82 vistas • hace 7 meses

FONTAGRO - Mirando al Futuro

86 vistas • hace 7 meses

FONTAGRO Medium-Term Plan 2025 - 2030

188 vistas • hace 7 meses



Greeting from Manuel Otero, Director General of IICA

80 vistas • hace 7 meses

¡Somos FONTAGRO, somos ciencia colaborativa en acción!

283 vistas • hace 8 meses

FONTAGRO – New Zealand: Together for a resilient agriculture

109 vistas • hace 10 meses

WEBSTORIES

Webinar Indicators / Social Media

21 webinars
12,978 views

10 videos
10,000 views

1,959
Subscribers

948
Followers

9,800
Followers

4,800
Followers

Science Voices (Researchers in agriculture)

New Website. New Platform
www.fontagro.org

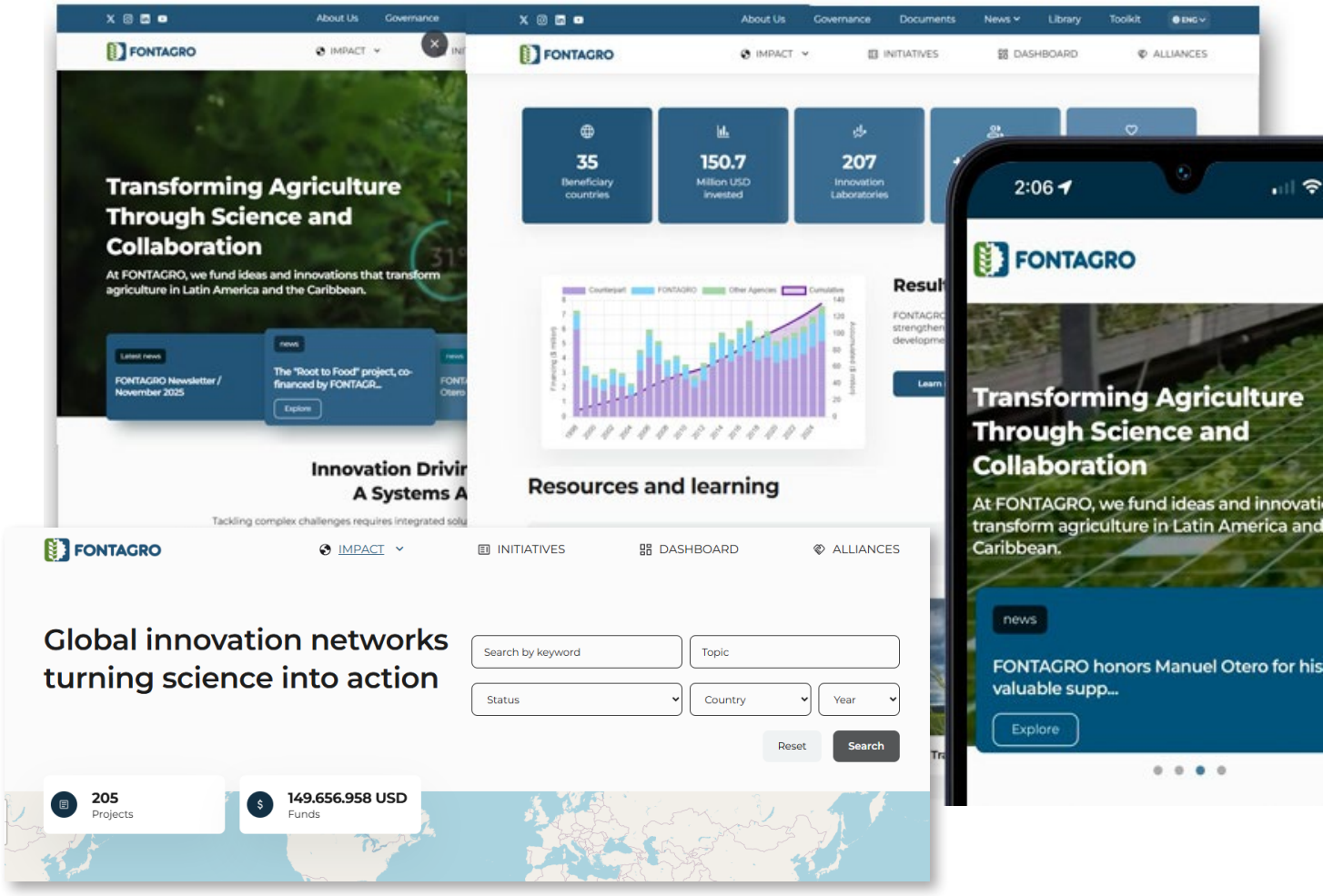
With the approval of FONTAGRO's Board of Directors, a comprehensive redesign and update of the institutional website and the project platform was carried out, aligned with international standards of communication, transparency, and access to scientific knowledge, in a bilingual version (ESP/ENG).

This modernization enabled the integration and centralized organization of all strategic, technical, and operational information related to FONTAGRO's portfolio of funded initiatives, consolidating a single digital space that facilitates navigation, open access to results, and the consultation of progress in research, innovation, and technological development in agriculture.

The new platform significantly enhances the user experience by providing more intuitive tools, dynamic visualizations, specialized search functions, and a more robust structure for disseminating publications, impact indicators, and multimedia content. It also strengthens FONTAGRO's position as a regional leader in digital transformation for agricultural knowledge management, fostering engagement with researchers, partner institutions, decision-makers, and multilateral organizations.

This advancement represents a key step in the institutional modernization strategy and contributes to increasing the international visibility of the work carried out by member countries, highlighting FONTAGRO's commitment to transparency, innovation, and scientific cooperation for the sustainable development of agriculture in Latin America and the Caribbean.

www.fontagro.org



Research, Development and Innovation

Technological impact and innovation maturity

• FONTAGRO projects achieve an average advancement of 3.1 levels on the Technology Readiness Level (TRL) scale, moving from an initial mode of TRL 3 (proof of concept) to a final mode of TRL 6 (prototype validated in a relevant environment). The project Sustainable Dairy Intensification recorded the largest technological leap, advancing four levels (from TRL 2 to TRL 6).

•The current portfolio includes around 130 technological solutions in development, designed to address agricultural and livestock challenges in Latin America and the Caribbean. Innovations range from genetic improvement (wheat, native potatoes) and food biofortification to digital technologies, nanotechnology, biologicals, and satellite methane monitoring, among others.

• The projects demonstrate an effective transition from applied research to technological validation and adoption, bringing solutions closer to real use by producers and technicians.

Influence on policy and decision-making

• Project results have contributed to adjustments in methodologies for national GHG inventories, technical standards, and rural extension programs.

• The evidence generated informs public policies and investments by providing concrete tools for more sustainable and resilient production models.

• Collaboration with public agencies and multi-stakeholder platforms has enabled results to go beyond experimental contexts and become integrated into institutional strategies.

Collaborative science and regional cooperation

• FONTAGRO promotes a model of collaborative science at the regional level, connecting teams from multiple countries and disciplines.

• This cooperation generates more robust and context-adapted solutions, strengthening regional integration in R&D. Notable examples include projects on citrus HLB (Argentina, Paraguay, Uruguay, and Bolivia), ecological livestock intensification (Argentina and Uruguay), and efficient irrigation using digital tools (Chile, Argentina, Uruguay, and Colombia).

• This approach enhances joint learning, the creation of public-private networks, and the inclusion of agricultural innovation in hemispheric agendas.

Capacity building and training

• All projects include components for knowledge management, training, and communication, through activities such as workshops, online courses, field days, and digital platforms.

• The training of young researchers and collaboration among institutions from different countries have been strengthened, generating sustainable scientific and institutional capacities.

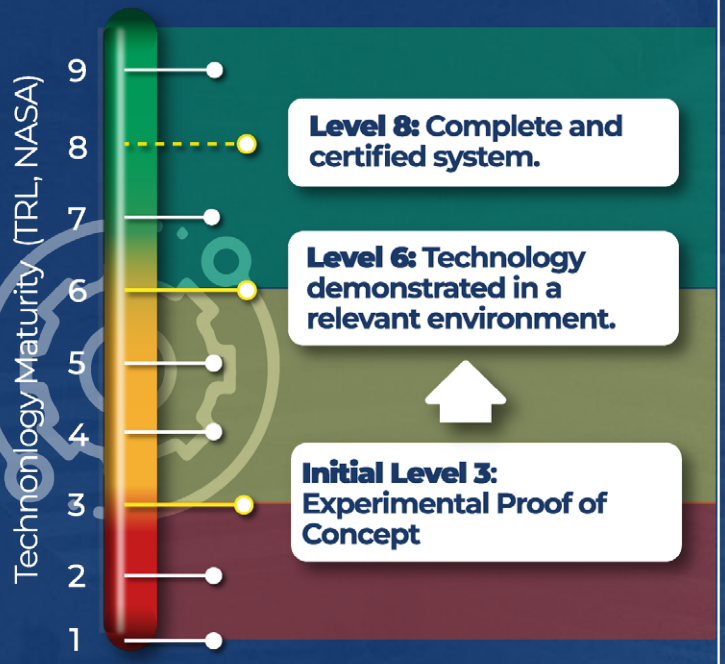
• These actions amplify impact beyond individual projects, leaving behind long-term capacities and collaboration networks across the region.

Evaluation and impact indicators

• In response to a request from the Board of Directors at its XX Extraordinary Meeting (July 2025), a report was prepared with outcome and impact indicators, as well as an analysis of economic benefits by country.

• The results confirm that FONTAGRO adds strategic value to regional agricultural innovation by combining science, cooperation, and technological development with tangible benefits for its member countries.

Maturity of the tecnologies



Most of our projects start at a technological maturity level 3 and end at level 6 (TRL, NASA).

Contribution of 7 PROJECTS

Investment of USD 8.1 million

Benefit of USD 83.3 million

1. Sweet potato (genetics and nutrition, 1998)

Investment: USD 970,000
Benefits: USD 19,192,934

2. Native potato (biodiversity and markets, 2005)

Investment: USD 1,066,405
Benefits: USD 204,257

3. Musaceae (seed production and integrated disease management, 2006)

Investment: USD 621,216
Benefits: USD 785,705

4. Pest Management in potato cultivation (sustainable and ecological production, 2006)

Investment: USD 900,000
Benefits: USD 1,740,476

5. Potato: new varieties new varieties (genetics and seed production, 2007)

Investment: USD 1,123,594
Benefits: USD 52,185,897

6. Horticulture (sustainable production and biologicals, 2007)

Investment: USD 924,400
Benefits: USD 906,478

7. Cassava, bell pepper, corn, and beans (competitive value chains, 2009)

Investment: USD 1,535,458
Benefits: USD 508,842

FONTAGRO plays a key role in the region's technological development by facilitating the transition of projects from early stages of technological maturity (TRL 3), where experimental proof-of-concept testing is conducted, to more advanced stages such as TRL 6, where technologies are demonstrated in relevant environments. In some cases, FONTAGRO has successfully advanced these initiatives to TRL 8, reaching complete and certified systems. This progress highlights FONTAGRO's transformative impact in promoting applied research, scaling up innovative technologies, and implementing them under real conditions, thereby driving sustainability and competitiveness in the agri-food sector across Latin America and the Caribbean.

New Zealand, Latin America and the Caribbean

Te Kāwanatanga o Aotearoa
New Zealand Government

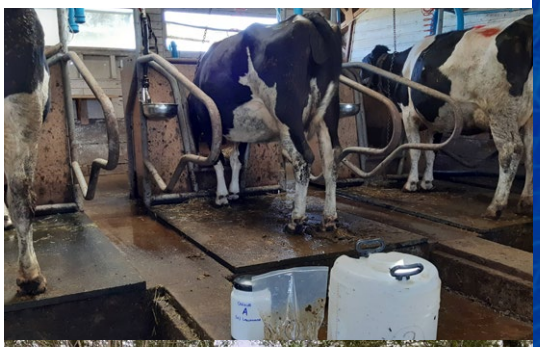
GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASES

Global alliances for agricultural sustainability and resilience.

The agri-food systems for meat and dairy production in New Zealand, Latin America, and the Caribbean play a vital role in global food security. These systems face the challenge of maintaining high quality while reducing greenhouse gas emissions in an environmentally sustainable way. Achieving this balance is essential to preserve outcomes in the face of climate change and environmental challenges.

Within this framework, the partnership between FONTAGRO, the Ministry for Primary Industries of New Zealand (MPI), and the Global Research Alliance (GRA) aims to accelerate the adoption of innovative and sustainable technological solutions in agri-food systems. The partnership has enabled the implementation of ten strategic initiatives in Latin America, benefiting twenty institutions across several countries in the region, with a combined investment of more than USD 1.9 million.
The project drives transformations in livestock and agricultural systems in the region, strengthening the capacities of producers and participating institutions, contributing to the sustainable transformation of food systems, and reinforcing adaptation and mitigation policies in response to climate change. This cooperation model fosters the exchange of ideas and innovation, generating long-term positive impacts toward more sustainable and resilient systems.

See link to projects



Active Projects

Active FONTAGRO Projects

1. Argentina, Uruguay, and Bolivia are driving the regeneration of agricultural soils through the estimation of carbon gaps and the validation of cover crops as a strategy for sustainable intensification. The initiative promotes agroecological practices that improve soil health, strengthen resilience, and contribute to climate mitigation. 250178.

2. Bolivia and Peru promote the use of biologicals derived from livestock manure to strengthen the sustainability of organic quinoa production. The initiative encourages efficient nutrient management and improved soil fertility through controlled anaerobic digestion, contributing to resilient, low-emission farming systems. 250257.

3. Colombia and Paraguay are developing a model for sustainable and resilient fruit production using AgTech 5.0 technologies that integrate robotics, automation, and artificial intelligence to optimize water use and restore ecological connectivity. The initiative strengthens local capacities and promotes digital agriculture. 250289.

4. Argentina, Brazil, Chile, and Costa Rica are strengthening the development and adoption of biologicals in horticultural and fruit systems through innovation networks, technology validation, and capacity building. The project promotes productive sustainability and value addition in regional agriculture. 25092.

5. Colombia and Argentina are developing sustainable technologies and participatory methodologies for the integrated management of the vector Dalbulus maidis and the maize stunting complex. The initiative strengthens participatory monitoring, biological control, and efficient water and nutrient use, contributing to more resilient agricultural systems. 25044.

6. Argentina, Paraguay, Uruguay, Spain, Brazil, and the United States are advancing soil organic carbon restoration through the promotion of no-tillage systems and good agricultural practices. The initiative generates scientific evidence and digital tools to guide sustainable management decisions, improve soil health, and increase production resilience. 250276.

7. Argentina, Bolivia, and Paraguay are promoting sustainable and climate-smart livestock systems in the Gran Chaco through technological innovations, silvopastoral systems, and efficient grazing management. The initiative seeks to improve productivity, reduce the carbon footprint, and strengthen local capacity for sustainable management. 250339.

8. The project addresses sanitary and commercial risks associated with cadmium in avocado orchards in Peru, Colombia, Ecuador, and Bolivia. It standardizes methodologies, conducts sampling and management trials, and develops agronomic practices to reduce metal absorption. It strengthens capacities through workshops, technical exchanges, and outreach materials, contributing to safer and more sustainable production systems. PC.

9. The project brings together Colombia, Panama, Peru, and Venezuela to strengthen the sustainable management of creole cattle through genetic characterization, conservation actions, and methane-emission assessments using remote sensors. The initiative seeks to enhance the resilience and efficient use of these adapted breeds and to strengthen technical capacities in the participating countries. PC.

10. The project promotes regenerative agriculture in Argentina and Paraguay through field pilots that integrate sustainable practices and digital agriculture. It generates evidence and replicable methodologies, fosters public–private dialogue, and develops regional public goods. It aims to improve productivity, soil health, and sustainability, strengthening capacities and supporting a more resilient agri-food transition. PC.

11. This project will strengthen the sustainability and competitiveness of soybean in Argentina, Uruguay, and Colombia through a regional network of comparative trials that optimize cultivar selection and management decisions. It develops predictive models and digital tools to improve yield and climate adaptation, and promotes knowledge transfer to farmers, technicians, and seed companies through coordinated regional governance and standardization. PC.

12. Argentina, Brazil, Chile, Uruguay, the Dominican Republic, the United States, and the United Kingdom are promoting the integration of livestock and forestry systems to strengthen resilience to climate variability, increase carbon sequestration, and diversify agricultural systems, fostering sustainable intensification practices and their adoption by producers and regional policies. Project financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-21532-RG.

13. Costa Rica, Argentina, Honduras, Panama, Peru, Colombia, the United States, Nicaragua, and the Dominican Republic are strengthening the sustainable intensification of agricultural systems in the Central American Dry Corridor through the introduction of sorghum and forage cereal genotypes adapted to local environments, promoting productivity and resilience to climate variability. Project financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-21550-RG.

14. Uruguay, Argentina, Costa Rica, and Panama are promoting innovation in pasture-based systems through the expansion and adoption of the 3RWeb digital tool, which optimizes grazing management and integrates nutrition and emission estimation modules, enhancing productivity, sustainability, and forage self-sufficiency. Project financed by the Government of New Zealand

through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-21533-RG.

15. Ecuador and Peru are applying conservation agriculture practices in potato–pasture systems to reduce greenhouse gas emissions, improve carbon storage in soils and biomass, optimize productivity, and strengthen the sustainability of family livestock systems. Project financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-21534-RG.

16. Spain, Argentina, Uruguay, and the United States are developing strategies to improve wheat resilience to climate variability through the characterization of physiological mechanisms and identification of drought- and heat-tolerant varieties, strengthening knowledge transfer and the sustainability of regional agricultural systems. ATN/RF-21535-RG.

17. Ecuador, Peru, Colombia, and Chile are strengthening the management of potato purple top complex through regional diagnosis, optimization of molecular detection protocols, and implementation of sustainable management and training strategies for producers and technicians, improving phytosanitary quality and crop productivity. ATN/RF-21536-RG.

18. Costa Rica, Honduras, Panama, Venezuela, Argentina, Colombia, and Nicaragua are promoting the development and use of biologicals to strengthen agricultural sustainability in Latin America through the harmonization of quality protocols, field validation, and producer and technician training to reduce synthetic input use and improve productivity. ATN/RF-21537-RG.

19. Costa Rica, Bolivia, and Peru are strengthening the conservation and genetic improvement of native potatoes to promote their resilience to climate variability and market value, combining traditional knowledge and genomic tools to preserve Andean agrobiodiversity and strengthen regional food security. ATN/RF-21538-RG.

20. Argentina, Chile, Colombia, Panama, Peru, Brazil, Costa Rica, and Uruguay are strengthening the production, use, and trade of certified seed potatoes to improve productivity, phytosanitary quality, and food security through producer training and harmonization of certification and phytosanitary standards. ATN/RF-21539-RG

21. Costa Rica, Honduras, Panama, Peru, and the United States are developing a regional plant breeding network to strengthen resilience and sustainability in horticultural systems, promoting more adaptable and nutritious crops and fostering scientific and technological cooperation in Latin America and the Caribbean. ATN/RF-21543-RG.

22. This project, led by FONTAGRO's Technical Administrative Secretariat (TAS), strengthens FONTAGRO's impact on the agri-food system of Latin America and the Caribbean through the clear definition of its thematic strategies, an effective communication plan, the enhancement of researchers' technical capacities, and the development of strategic partnerships. ATN/RF-21524-RG.

23. Colombia and Peru are promoting competitiveness in the mango sector through a biorefinery approach that maximizes the use of pulp, peel, and seed to develop high-value-added products, strengthening the economic and environmental sustainability of production systems. ATN/RF-21037-RG.

24. Ecuador, Colombia, and Chile are developing multifunctional bioprotectants based on bacterial metabolites and natural compounds to improve postharvest fruit safety and nutritional quality, reducing losses and enhancing sustainability in fruit supply chains. ATN/RF-21044-RG.

25. Uruguay and Argentina are promoting transitions toward multifunctional landscapes through sustainable practices, satellite information integration, and data modeling to optimize agricultural production, reduce environmental impacts, and strengthen resilience in the Pampas biome. ATN/RF-21247-RG.

26. Colombia and Ecuador are strengthening the sustainability of tropical dairy systems through climate-smart production strategies that improve feed efficiency and productivity, reduce greenhouse gas emissions, and contribute to regional food security. ATN/RG-21038-RG.

27. Argentina and Chile are promoting livestock sustainability through practices adapted to climate variability in rural communities of Río Negro, Neuquén, and La Araucanía, strengthening food security and efficient resource management. Project financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-20639-RG (FTG) / ATN/RF-20640-RG (MPI-NZ).

28. Chile, Argentina, Peru, Panama, and the Dominican Republic are strengthening nitrogen-use measurement and optimization in agricultural production by developing specific emission factors and efficient practices that reduce nitrous oxide emissions and enhance sustainability in agri-food systems. Project financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-20642-RG (FTG) / ATN/RF-20641-RG (MPI-NZ).

29. This project, led by FONTAGRO's TAS, promotes the creation of Seed Funds to foster the formulation of regional agri-food innovation initiatives. Through workshops and strategic partnerships, it encourages the co-financing of scientific and technological projects that strengthen sustainability, resilience, and sustainable intensification in Latin America and the Caribbean. ATN/RF-19885-RG.

30. Chile, Argentina, Uruguay, and Honduras are developing a free digital platform to support crop management, facilitating agronomic decision-making and promoting sustainable intensification of agricultural systems in the face of climate variability. ATN/RF-20631-RG.

31. Argentina, Bolivia, Paraguay, and Uruguay are strengthening the sustainability and resilience of small livestock producers in the Gran Chaco through a farm network that promotes adaptive management and multiple-use forestry, integrating sustainable silvopastoral systems that conserve biodiversity and improve local livelihoods. ATN/RF-20635-RG.

32. Colombia, Ecuador, and Honduras are promoting digital agriculture through the implementation of 4.0 technologies for efficient water management in fruit crops, integrating moisture sensors, IoT networks, and web applications to optimize irrigation and strengthen sustainability and competitiveness. ATN/RF-20634-RG.

33. Argentina, Chile, Colombia, and the United Kingdom are promoting livestock resilience through good animal-welfare practices integrated into a regional co-innovation platform that improves productivity, sustainability, and adaptation to climate variability in bovine and ovine systems. ATN/RF-20636-RG.

34. Colombia and Argentina are advancing technological innovations to reduce methane emissions in pasture-based livestock systems through remote sensing, feed additives, and NIRS spectroscopy to improve productive efficiency and gas measurement. Project financed by the Government of New Zealand through its contribution to the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-20637-RG.

35. Chile, Argentina, Colombia, Uruguay, and New Zealand are promoting a Latin American network for the development and transfer of agricultural biologicals, fostering sustainability through the efficient use of biofertilizers and biocontrol agents to increase productivity and phytosanitary control. Project financed by the Government of New Zealand through its contribution to the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-20643-RG.

36. Colombia, Argentina, and New Zealand are collaborating to enhance maize resilience to climate change through the integrated use of beneficial fungi with biofertilizing and biopesticidal functions, reducing agrochemical use and increasing drought tolerance and soil carbon sequestration. Project financed by the Government of New Zealand through its contribution to the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-20638-RG.

37. Peru, Ecuador, Costa Rica, and New Zealand are improving the sustainability of dual-purpose livestock systems in the Amazon through the use of agro-industrial residues as feed supplements. The project increases productivity, reduces emissions, and promotes efficient resource use. Financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-20627-RG.

38. Uruguay, Panama, Peru, Colombia, Costa Rica, the United States, and New Zealand are strengthening regional capacities for methane monitoring, reporting, and verification in rice ecosystems through an AI-based satellite tool. This initiative will provide reliable, open-access estimates for producers and policymakers, improving sustainability in the sector. Financed by the Global Methane Hub. GMH-1732.

39. Panama, Argentina, Colombia, and Costa Rica are assessing the technical, economic, and environmental feasibility of vertical agriculture systems as a sustainable alternative for intensive food production in Latin America and the Caribbean. The project aims to improve productivity and efficiency in water and space use through controlled or semi-controlled systems. ATN/RF-20632-RG.

40. FONTAGRO's TAS leads the implementation of FONTAGRO's Knowledge Management and Communication Plan 2020–2025, strengthening open science, innovation, and the dissemination of agri-food knowledge. The initiative promotes strategic partnerships and regional exchange on bioeconomy for sustainable development in Latin America and the Caribbean. ATN/RF-19946-RG.

41. Panama, Nicaragua, Honduras, Colombia, and the Dominican Republic are promoting the adoption of iron-biofortified bean varieties to strengthen food and nutritional security in Latin America and the Caribbean. The initiative validates and disseminates climate-resilient varieties, strengthens value chains, and generates regional knowledge to boost demand and technology adoption. ATN/RF-19314-RG.

42. Colombia and Peru are implementing multipurpose silvopastoral systems as a sustainable alternative to strengthen family livestock production in tropical regions. The project builds a public-private innovation platform, fosters adoption of productive and environmentally sustainable practices, and values ecosystem services to design incentive mechanisms for scaling. ATN/RF-19277-RG.

43. Argentina, Uruguay, Colombia, and Costa Rica are developing a satellite tool to estimate in real time the quantity and quality of biomass available in pasture-based livestock systems, improving efficiency, reducing monitoring costs, and strengthening regional capacities for GHG reporting and verification. Financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-19787-RG (FTG) / ATN/RF-19788-RG (MPI-NZ).

44. Argentina, Chile, Peru, and Ecuador are developing digital tools to optimize irrigation and fertilization management in quinoa production, reducing yield gaps and improving water and nitrogen-use efficiency. The initiative strengthens sustainability and profitability for small producers through free-access models and calculators tailored to diverse environments. ATN/RF-20628-RG.

45. Costa Rica, Honduras, Nicaragua, Panama, and Spain are developing Geographical Indications (GIs) for Mesoamerican cacao to enhance its origin value, promote collective innovation management, and protect the biocultural heritage of cacao-growing territories. The initiative integrates multidisciplinary studies to identify quality-defining factors of fine-flavor cacao and strengthen organizational capacity for GI implementation and sustainability. ATN/RF-20629-RG.

46. Colombia, Ecuador, and Bolivia are developing new early-maturing, drought-resilient potato varieties to strengthen food and economic security for small Andean farmers. The initiative promotes regional scientific cooperation, participatory breeding, and the creation of an inter-institutional platform for cultivar evaluation and selection under climate variability. ATN/RF-20633-RG.

47. Bolivia and Ecuador are applying nanotechnology to improve soil moisture retention and increase productivity in drought- and desertification-affected areas through the development and validation of low-cost, environmentally safe nano-clays and hydrogels. ATN/RF-20630-RG.

48. Colombia and Ecuador are developing and evaluating titanium dioxide, zinc oxide, and zeolite-based nanofertilizers to improve nutrient-use efficiency, increase productivity, and reduce nitrous oxide emissions in agricultural systems. The initiative promotes the creation of a spin-off company to expand producer access to these technologies and strengthen sustainable fertilization practices. ATN/RF-18959-RG.

49. Ecuador, Argentina, and Spain are developing an innovative bioprocess based on native fungi to reduce cadmium accumulation in cacao beans, strengthening the sustainability and competitiveness of fine-flavor cacao. The initiative combines applied research, bioreactor validation, and technology transfer to small farmers, promoting climate-smart and sustainable practices. ATN/RF-18951-RG.

50. Argentina, Chile, Colombia, Spain, Uruguay, and Brazil are developing next-generation microbial inoculants that enhance agricultural productivity and significantly reduce nitrous oxide emissions. Using non-transgenic gene-editing techniques such as CRISPR/Cas9, the project strengthens traditional inoculant benefits and positions Latin America as a leader in sustainable biotechnological innovation. ATN/RF-18786-RG.

51. Uruguay, Argentina, Chile, Colombia, and Costa Rica are strengthening capacities to quantify and monitor soil organic carbon, contributing to climate-change mitigation and the goals of the Paris Agreement. The project identifies carbon-sequestration opportunities and assesses economic and environmental impacts through a regional multi-agency platform. Financed by the Government of New Zealand through the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-18769-RG (FTG) / ATN/RF-18770-RG (MPI-NZ).

52. Argentina, Chile, Colombia, Ecuador, Paraguay, Uruguay, and Brazil are enhancing regional capacities in gene editing through CRISPR/Cas9 technology for the improvement of crops and livestock species of agricultural interest, promoting productivity, sustainability, and technological sovereignty in Latin America. ATN/RF-18757-RG.

53. Colombia, Costa Rica, Ecuador, Nicaragua, Panama, the Dominican Republic, Bolivia, Paraguay, Peru, and the United States are strengthening regional capacities for the prevention and management of Fusarium wilt in bananas. The project promotes early diagnosis, biosecurity, and technology transfer to producers. ATN/RF-18761-RG.

54. Chile, Panama, Argentina, Colombia, and Venezuela are promoting adoption of the System of Rice Intensification (SRI) to increase productivity and resource-use efficiency, strengthening climate resilience in rice cultivation across Latin America. ATN/RF-18105-RG.

55. The Dominican Republic, Peru, and Ecuador are promoting technological innovations in family-based organic banana production to reduce packing losses and increase productivity through continuous improvement and the use of the Ma$ Banano app, strengthening crop sustainability and soil health. ATN/RF-17233-RG.

56. Chile, Uruguay, Argentina, Colombia, and Spain are implementing new technologies to increase water-use efficiency in agriculture through sensors, satellite imagery, and digital irrigation management platforms, advancing productive sustainability toward 2030. ATN/RF-17950-RG.

57. Argentina, Uruguay, the Dominican Republic, Costa Rica, and Honduras are developing AgTech tools for climate-smart dairy production, strengthening producers' and technicians' capacity for sustainable sector management. Supported by the Government of New Zealand and the Global Research Alliance on Agricultural Greenhouse Gases (GRA). ATN/RF-18078-RG.

58. Argentina and Chile are developing an agroecological model for controlling avian coccidiosis in family farming systems, promoting sustainable practices, probiotic use, and animal welfare, and strengthening a regional innovation network. ATN/RF-18136-RG.

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