Call for proposals 2025

Driving sustainability in agri-food systems of Latin America and the Caribbean: technologies and innovations with a strong on-the-ground impact to improve efficiency, resilience, and reduce the environmental footprint.

Terms of Reference
Closing April 11th, 2025
Single Phase

Technical Administrative Secretariat
FONTAGRO

IDB Inter-American Development Bank

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SECTION I. BACKGROUND [i, ii, iii, iv, v, vi, vii, viii, ix, x, xi, xii]

1.1 Global challenges for agri-food systems and sustainable resource management in the context of climate change by 2050. In the coming decades, humanity must meet the food needs of a growing global population while ensuring sustainability, without increasing greenhouse gas emissions and environmental footprint. By 2050, the world population will exceed 9 billion, with the middle class representing more than half of that total. This will require an estimated 70% increase in global food production to meet new demands. At the same time, competition for water, energy, and arable land will intensify in many regions due to the impacts of climate change. Agri-food systems will face extreme events, such as heat waves, droughts, and floods, which will affect production potential, food distribution, and waste—currently estimated at between 30% and 50% of what is produced. In other words, the coming decades will require agriculture that is more productive and efficient, with minimal climate impact and maximum resilience in production systems and territories. Just as the Green Revolution increased agricultural productivity to strengthen food security, the future challenges us not only to further increase production levels but also to achieve this with lower resource use and reduced impacts on the global climate.

1.2 Challenges for 2025, productivity, efficiency sustainability and resilience of farms in the face of climate change. In many Latin American and Caribbean (LAC) regions, there are still large productivity gains to be made in agricultural and agri-food systems. At the same time, there is a need to address international initiatives directed towards reducing greenhouse gas (GHG) emissions and improving on-farm adaptation to climate change. There is also a need to consider the important contribution local knowledge and indigenous practices make in efforts to address climate change and in maintaining a protected and productive natural environment, essential to ensuring food security. In this context, in the coming years knowledge and innovation will be required to facilitate the technological change needed on farms at all scales. To achieve this, a systemic approach and the cooperation of local institutions (universities, research and innovation institutes, private sector, non-governmental organizations) will be necessary to facilitate these changes. FONTAGRO will support the co-financing of technologies and initiatives with a strong on-the-ground impact that promote increased productivity, efficiency, resilience and profitability of farms in a sustainable manner without increasing their environmental footprint. A focus will be placed on proposals appropriate to the scale, social and economic characteristics of the region and include effective extension and transfer processes to improve adoption rate.

1.3 Article 13 of the Paris Agreement establishes the Enhanced Transparency Framework (ETF), which obliges countries to provide crucial information through the Biennial Transparency Reports (BTR) to track progress and compliance with NDCs (Nationally Determined Contributions). Meanwhile, Article 6 of the Paris Agreement seeks to enhance climate ambitions by introducing cooperative approaches and centralized mechanisms to replace the Clean Development Mechanism (CDM), highlighting the importance of collective effort to foster sustainable development through innovative strategies. However, progress toward achieving Latin American countries' agricultural GHG mitigation goals has been slow due to key challenges, including: (a) lack of reliable time series data that can demonstrate changes in emissions due to changes in agronomic practices or the implementation of new technologies; (b) lack of a portfolio of GHG mitigation technological options that also meet sustainable development, food security and biodiversity conservation; c) lack of systems to increase the adoption of existing sustainable practices that contribute to climate change mitigation and the sustainable development goals.

1.4 IPCC Sixth Assessment Report (2022): Impacts, Adaptation, and Vulnerability. This report emphasizes that the development of new technologies and innovations must focus on increasing the climate resilience of agricultural systems, promoting environmental sustainability, and improving producers' adaptive and mitigation capacities. The report highlights the importance of collaboration, appropriate policies, and access to financing to ensure these innovations are effective. This report is essential for the development of new technologies and innovations in the agricultural sector due to the wide array of challenges climate change poses to agriculture and the urgent need to adapt agricultural systems to ensure long-term food security. One of the most critical aspects is the direct impact of climate change on agriculture. Rising global temperatures affect crop productivity, with a general trend of declining yields, especially in tropical and subtropical regions. Additionally, shifts in precipitation patterns, with increased variability and frequency

of extreme events such as droughts and floods, present a significant challenge for water resource management in agriculture. Furthermore, the growing frequency and intensity of extreme climate events, like heat waves, storms, and prolonged droughts, threaten the stability of agri-food systems, increasing the risk of crop losses and deteriorating rural livelihoods. These changes not only impact crops but also contribute to the spread of pests and diseases affecting both plants and livestock, posing an additional threat to agricultural production. This report addresses climate change mitigation in the agricultural sector, emphasizing the need to reduce greenhouse gas emissions. Innovations that promote more efficient fertilizer use and sustainable livestock management are essential to minimizing the climate impact of productive activities while improving the overall sustainability of the agricultural system. The IPCC report underscores that developing new technologies and innovations in the agricultural sector should focus on boosting climate resilience, promoting environmental sustainability, and enhancing farmers' adaptive capacity. These efforts require strong collaboration among governments, research institutions, and the private sector, along with adequate access to financing to effectively implement technological innovations in the most vulnerable regions.

1.5 The vulnerability of agricultural systems as a key issue. The areas most affected by climate change will be those already facing climatic limitations, such as arid and semi-arid zones, and regions where small-scale agriculture is predominant, particularly in developing countries. In Latin America and the Caribbean, rural communities that rely heavily on agriculture are particularly vulnerable to climate impacts. Furthermore, the IPCC report highlights that social inequalities amplify this vulnerability, as smallholders and marginalized communities have limited access to the resources needed to adapt to climate changes.

1.6 The importance of promoting adaptation and resilience in the agricultural sector while reducing the environmental footprint. New technologies must focus on developing more resilient agricultural systems capable of withstanding the impacts of climate change. For example, innovations are needed that include the development of crop varieties more resistant to drought, heat, and flooding, as well as improvements in water and soil management practices. Additionally, precision agriculture and digitalization offer significant opportunities for optimizing resource management through the use of monitoring technologies and climate data that enable more efficient responses to climate fluctuations. The integration of early warning systems is also crucial to mitigate the impact of extreme events, providing farmers with timely information to make informed decisions and reduce potential losses.

1.7 The importance of innovation in agricultural practices. Crop diversification is a key strategy for enhancing resilience, as it allows for greater flexibility in the face of adverse climatic conditions and contributes to the sustainability of the agricultural system. Likewise, the adoption of approaches such as agroecology and regenerative agriculture, which restore ecosystems and improve soil health, is essential to strengthening the sector's adaptive capacity. In parallel, biotechnology plays a vital role in adapting to climate change through the development of genetically modified or improved varieties that are more tolerant to climate stressors.

1.8 The need for integrated approaches to climate change adaptation and mitigation. Nature-based solutions that use ecosystems to address climate challenges, such as restoring degraded ecosystems or protecting watersheds, offer opportunities to mitigate impacts in the agricultural sector. Policies that promote the adoption of climate-smart technologies are also needed, supporting research and innovation in agriculture. This should be accompanied by regulatory frameworks that facilitate the implementation of mitigation and adaptation measures at the local and regional levels. Technology transfer between countries and regions is essential for farmers to adopt solutions tailored to their local contexts. International cooperation and public-private partnerships are critical to accelerating the adoption of innovative technologies and enhancing the resilience of agricultural systems. Moreover, it is essential to ensure access to climate financing so that farmers, particularly smallholders, can invest in the technologies needed to adapt to new climatic conditions.

1.9 FONTAGRO supports the creation of Regional Public Goods through the co-financing of innovation platforms. To this end, this call is being launched to identify the best project proposals whose results generate concrete evidence of ***"how to promote technologies and innovations with a strong on-the-ground impact to improve efficiency, resilience, and reduce the environmental footprint"***. The aim is to co-finance initiatives that, through their potential impacts, demonstrate improved productivity on farms with a smaller environmental footprint, while

promoting the development of sustainable and resilient regional models that help producers adapt to and mitigate the effects of climate change. The proposed innovations must be aligned with FONTAGRO's 2020-2025 Medium Term Plan (MTP) and the Sustainable Development Goals (SDGs).

SECTION II. ABOUT FONTAGRO

2.1 Establishment. FONTAGRO was created in 1998 with the objective of establishing a sustainable financing mechanism for the development of agricultural technology in LAC, and establishing a forum for the discussion of priority topics of technological innovation. The purpose is to promote the increase in the competitiveness of the agri-food sector, ensuring the sustainable management of natural resources and the reduction of poverty in the region. It currently has a membership of 15 countries and has two sponsors, the Inter-American Development Bank (IDB), which is also its legal representative, and the Inter-American Institute for Cooperation on Agriculture (IICA).

2.2 Medium Term Plan. The 2020-2025 Medium Term Plan (MTP) has renewed FONTAGRO's philosophy, with a vision to ***"Transform agri-food systems through knowledge so that they are more inclusive and sustainable with the environment and society" and a mission to "Lead the articulation, cooperation and regional dialogue through the sustainable co-financing of public goods initiatives that contribute to the knowledge and innovation of agri-food systems and to the improvement of the quality of life of society"***. At the same time, FONTAGRO promotes the values of integrity, solidarity, efficiency, transparency, and respect. This call is framed within the three strategies of the 2020-2025 MTP: (I) "Networked, resilient and sustainable farms"; (II) "Productive systems, agroecosystems and sustainable territories"; and (III) "Food, nutrition and health", as well as cross-cutting themes, which must be included in all initiatives to be co-financed.

2.3 Cofinancing. FONTAGRO co-finances initiatives that generate agricultural Regional Public Goods for LAC, in which countries share challenges and opportunities for growth and development that are addressed more efficiently when institutions work collectively, participatively and cooperatively. In that sense, the regional platforms promoted by FONTAGRO are, in themselves, a Regional Public Good, as is the knowledge and the lessons learned that they generate. FONTAGRO's co-financing is intended to establish and/or support cooperation platforms, leveraging resources from other agencies and participating institutions. To date, FONTAGRO has supported 204 projects and initiatives, which represent a total investment of US$150 million, of which US$30 million have been contributed by FONTAGRO, US$21 million by other strategic partners; and US$99 million correspond to counterpart contributions.

SECTION III. OBJECTIVE OF THE CALL

Objective. The objective of this call is **to identify regional research, development, and innovation projects with strong on-the-ground impact that drive efficiency and resilience, and reduce the environmental footprint in the agri-food systems of Latin America and the Caribbean.**

3.2 Description. This call aligns with Strategies I and II of the 2020-2025 MTP, which aim to increase the number of technologies and innovations with high potential for adoption and impact on the resilience and sustainability of farms, agroecosystems, and territories. Initiatives should build on prior scientific knowledge and either promote new innovations or validate those that are existing, promising, or proven to meet the call's objective. In light of the above, as well as the interests of FONTAGRO's member countries and potential co-financing agencies, the following are some example topics relevant to this call, presenting complementarities or combinations of technological, organizational, and institutional innovations:

> **i. Increased productivity and efficiency of agricultural, livestock, or mixed systems with lower emissions or a reduced environmental footprint.** Projects that demonstrate how producer groups implement technologies that increase productivity and efficiency of production systems while reducing GHG emissions or other aspects of the environmental footprint. Some innovative solutions may be those that reduce greenhouse gas emissions associated with agricultural or livestock production, or that decrease other aspects of the environmental footprint.

ii. Quantification of GHG emissions. Projects focused on the precise measurement and estimation of GHG emissions, with a particular emphasis on methane gas, and the evaluation of reductions achieved through innovative agricultural or livestock practices. Proposals that develop new quantification methodologies or adapt existing technologies to measure and verify emission reductions, thereby enhancing the accuracy of environmental impact assessments, will be valued. Initiatives aimed at improving the activity data necessary for more precise emission estimates of productive systems and sectors at the national or sub-national level will also be valued. Results will improve national governments' ability to Monitor, Report, and Verify GHG emissions and removals in their Biennial Transparency Reports (BTR) under the Enhanced Transparency Framework (ETF), as well as mitigation commitments under the NDCs in the Paris Agreement.

iii. Sustainable intensification of production systems, agroecosystems, and local natural resource management, using combined climate adaptation and mitigation strategies. The goal is to identify technologies and innovations that sustainably increase productivity, foster improvements in producers' income and quality of life, integrated farm network management, smart farming technologies, strategic production diversification, new mixed and complementary production models, agroecological practices, smart fertility management, water and soil use, and sustainable ecosystem and biodiversity management, all of which demonstrate greater and better resilience in production systems. By seeking synergies between mitigation and adaptation measures, this approach increases the likelihood of benefits for producers as they adapt to climate change.

iv. Strategies for improved on-the-ground transfer of knowledge, technologies, and innovations to producers. Strategies to improve the processes of transference to beneficiaries (producers, cooperatives, producer associations), demonstrating concrete on-the-ground results and impacts on producer farms. This includes actions for experience sharing on practices that involve extension services, the use of knowledge and traditional learning and leadership methods, and the development of leadership and equal opportunities for women and young people.

SECTION IV. FINANCING

4.1 Amount of the Call. This call will be funded with FONTAGRO's own resources. The total funding amount for the call is $1,000,000. FONTAGRO will co-finance up to five projects with a maximum of $200,000.

4.2 Counterpart. The institutions participating in the platforms must, either individually or in partnership, co-finance the project by providing counterpart funds in cash or in kind, or a combination of both. **The counterpart amount must be at least twice the amount requested from FONTAGRO**.

4.3 Policies and conditions. This call is subject to the provisions detailed in FONTAGRO's current Operations Manual (MOP), IDB policies, these Terms of Reference, and any other decisions of the Board of Directors recorded in the Minutes.

4.4 Additional sources of financing. This call may have additional sources of financing if, at the time of final selection of projects, there were other agencies interested in co-financing them, in accordance with their regional priorities and/or other specific conditions.

SECTION V. ESTABLISHMENT OF A REGIONAL INNOVATION PLATFORM

5.1 Platform for Regional Innovation (PRI). Existing or new Platforms for Regional Innovation, or regional innovation consortia, will be co-financed. These platforms must be made up of public entities or public-private alliances that come together to design and implement a regional technical cooperation project in compliance with the terms of reference of this call. All projects must include producers, producer groups, associations, and cooperatives as recipients of the project's outcomes.

5.2 Platform for Regional Innovation Participants. Platforms for Regional Innovation must promote institutional practices or arrangements that strengthen

the public or public-private entrepreneurial ecosystem and connect producers with science and technology actors. The latter must be identified and involved from the moment of the project's presentation. The PRI must link the different actors with the final users or beneficiaries and be comprised of: a) at least one public or private scientific research center (university or national research institute), b) direct beneficiaries included in the testing or validation process (producers), c) an entrepreneur or entrepreneurial team (optional), d) other associated organizations (optional), and e) research organizations from the United States, Brazil, Mexico, Canada, and the European Union as associated organizations within the PRI.

5.3 Administrative role of participants. Participants' roles within the PRI are outlined in the Operations Manual (MOP) Section II. For administrative project implementation, "only one institution" shall act as the "executing agency" (EA) and, therefore, be legally authorized to act as such and manage funds in U.S. dollars on behalf of the other participants, who will act as co-executors (if they receive funds from FONTAGRO through the EA) and optionally as associated organizations (if they participate with their own funds).

5.4 Technical role of participants. Platforms for Regional Innovation participants must be multi- and interdisciplinary, with a multidimensional approach (scientific, productive-agronomic, social, economic, technological, environmental, value-adding, etc.) consistent with the technology or innovation being validated. Considering potential complementary technical functions, participants may be public or private institutions at the national, regional, and/or international levels.

5.5 General Aspects of Regionality. This call prioritizes the establishment of platforms made up of partners from different regions and with diverse capabilities and strengths in technical disciplines to complement each other. The following regions are recognized: (1) Southern Cone, (2) Andean Region, (3) Central America, (4) Caribbean Region, and (5) extra-LAC region. FONTAGRO will fund only member-country institutions, while other donors may choose to support initiatives involving FONTAGRO and non-FONTAGRO members, provided they are IDB members.

5.6 Specific Aspects of Regionality. FONTAGRO will co-finance projects executed by public institutions or public-private alliances **from at least two FONTAGRO member countries. This means that the activities to be carried out in the project must be implemented at least in those two member countries. With this met, institutions from non-FONTAGRO member countries**, provided they are IDB members, and regional or international organizations can participate as associated organizations with a facilitating or complementary role and their own resources.

5.7 Other Aspects of Global Regionality. Institutions from non-IDB member countries may participate by contributing their own funds to the project, either by entering into an agreement with the IDB, legal representative of FONTAGRO, or directly with PRI's institutions, in accordance with IDB/FONTAGRO policies and regulations.

SECTION VI. PROCESS OF PROJECT APPLICATION AND EVALUATION (SINGLE PHASE)

The project submission and evaluation process for this call is organised in a **single phase** that involves the one-time submission of final project proposals.

6.1 Opening of the call. The call will be open from **January 2nd, 2025, to April 11th, 2025, at 3:00 PM (Eastern Time, U.S., Washington D.C.)**.

6.2 Preparation of a final project proposal. Project proposals must be submitted as final and in compliance with all provisions detailed in the Operations Manual (MOP) Section II, the instructions, and the Terms of Reference of this call. The project document must be prepared in a participatory manner among the members of the consortium, in Spanish or English and following the **Instructions Form**. Both a Word document and an Excel document must be submitted together for acceptance.

6.3 Submission of the final proposal through the FONTAGRO website. The final project proposal must be submitted through the online system and include two documents: a) the proposal form (Word document), and b) the complementary information form in Excel format. **Final proposals sent to FONTAGRO by other means or in other formats, or missing either the Word or Excel documents, will not be accepted.**

6.4 Deadline. Final proposals will be accepted until **April 11th, 2025, at 3:00 PM (Eastern Time, U.S., Washington D.C.)**. Once received, project proposals cannot be modified. Proposals received after the specified deadline or submitted by means other than FONTAGRO's digital application system will not be considered.

6.5 Evaluation of final proposals. An external panel will evaluate the final proposals according to the criteria outlined in the Operations Manual (MOP) Section II. The panel will recommend for funding those projects with a score equal to or greater than 75 points (on a scale of 100 points).

6.6 Recommendation report. The panel will prepare a proposal recommendation report that will be sent to the FONTAGRO Board of Directors (BD) for co-financing consideration. The BD will approve the co-financing allocation, and its decision will be final and non-appealable.

6.7 Interview of finalists. FONTAGRO may request a virtual or in-person interview with finalist proposals to inform the co-financing decision.

6.8 Notification of selected proposals. The Technical Administrative Secretariat (TAS) of FONTAGRO will notify only the winners of co-financing approval, both via email and on the FONTAGRO website.

6.9 Financing authorization. Final proposals receiving comments from the external panel must incorporate those recommendations and make necessary adjustments to the proposals in a period no longer than 30 days from the official communication from FONTAGRO regarding their selection.

6.10 Submission of final adjusted versions. Proponents of selected proposals must submit final project proposals in a high standard of editorial and content quality, in compliance with the requirements in the current MOP and respective instructions.

6.11 Compliance with the eligibility requirements to be an executing agency. Those institutions acting as the executing agency must certify that they meet the requirements for managing funds with the Inter-American Development Bank (IDB), legal representative of FONTAGRO. Failure to comply will disqualify them from this role, and financing for the project may be cancelled.

SECTION VII. CALENDAR

Phase I	Dates
Announcement of the Call	January 2nd, 2025
Deadline for project submission	April 11th, 3:00 PM (Eastern Time, Washington, D.C.)
Evaluation of projects	April 11th to May 5th
Selection of winning projects	July - Agust

INFORMATION

Technical Administrative Secretariat (TAS) / fontagro@fontagro.org / http://www.fontagro.org

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