



III COMPETITION OF SUCCESSFUL CASES OF INNOVATIONS IN FAMILY AGRICULTURE “AGRICULTURE AND NUTRITION”

TERMS OF REFERENCE
TECHNICAL ADMINISTRATIVE SECRETARIAT

Organized by



With the support of



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SECTION I. BACKGROUND

1.1 Global challenges of agriculture and food for 2050. Looking ahead to the coming decades, one of the greatest challenges facing humanity is how to meet the growing needs of the population in terms of demand for food while, at the same time, ensuring the sustainability of natural resources and resilience to climate change. It is estimated that by 2050 world population will exceed 9 billion people and that the middle class will constitute more than half the population (Alexandratos et al, 2012). Food production will need to increase by 70% to meet demand, and 80% of this increase could come from improvements in productivity and intensification of agricultural systems, with the rest from expanded land use. The increase in population will intensify competition for resources between agriculture and expanding urbanization.

1.2 FAO (2016) estimates that climate change will be one of the permanent challenges for agricultural production which will require its transformation into new adapted and sustainable systems. The IPCC (2018) projects that countries in the tropics and subtropics of the southern hemisphere will experience greater impact on economic growth due to climate change increasing global warming from 1.5°C to 2°C. The measures of adaptation to climate change include diversification and combination of agricultural activities, promotion of interseeding of crops, combination of silvopastoral systems with other activities, use of intelligent irrigation systems, agriculture under controlled environmental conditions and/or vertical agriculture, and other measures of sustainable intensification. Similarly, knowledge of the change in the greenhouse gas (GHGs) emission rate will also be critical for determining how a productive system can be more efficient in order to support the targets for decreasing the inventories of these gases. Several studies show that existing food systems are responsible for 20-30% of GHG emissions, 70% of water extraction and 70% of biodiversity loss (Vermeulen et al, 2012). Latin America and the Caribbean (LAC) make up 38% of the land used by the agricultural sector and have one of the most important reserves of biodiversity, soils, and freshwater resources. The extensive area devoted to agriculture, combined with LAC's great diversity of climates, means that this region is critical for strengthening regional and global food security. It is also important to note

that a large proportion of the land is dominated by medium- and small-scale agriculture, estimated at approximately 15 million productive units covering about 400 million hectares (Berdegue et al, 2011).

The Green Revolution, above all the increases in agricultural productivity in recent decades, achieved improvements in the food supply in the most vulnerable regions. However, the greater supply of food does not ensure an improvement in the nutrition of the population. As a result, many research programs changed their framework from a concept of "more calories improve nutrition" to one of "incorporating specific micronutrients into the diet." These programs have identified various mechanisms which can improve nutrition from agriculture, either directly or indirectly (through improvements in income as Webb (2013) points out). Many of these programs, however, have not yet succeeded in generating solid evidence that their approach results in better nutrition.

1.4 In 2017, there were still around 815 million people in the world who suffered from chronic undernourishment, 5% more than in 2015 (FAO, 2017). This increase, which took place in less developed regions, was due to factors such as the impact of climate variability on agriculture, degradation of natural resources, decline in adoption of innovations, decrease in promotion of producer education programs, and the low level of empowerment of women and young people, to mention some of the causes. In this situation, identification of successful cases of efforts to link agriculture with improvements in nutrition and their scaling up, especially promotion of investment in research on the issue, have an enormous potential to stimulate nutrition (Hertforth et al. 2012).

1.5 In the international arena several organizations have taken actions to strengthen food security through agriculture, paying special attention to nutrition. The United Nations, among its sustainable development goals, has dedicated one, specifically objective 2, to ending hunger, achieving food security and improving nutrition and promoting sustainable agriculture. In addition, the agenda of Action on Nutrition (2016-2025) encourages organizations to make joint efforts to eradicate hunger and prevent all forms of malnutrition. Other organizations such as the

CGIAR system through the program on Agriculture for Nutrition and Health, specifically the HarvestPlus initiative, have developed genetic materials enriched with minerals and vitamins through biofortification. Biofortification is an example of how agriculture can positively influence nutrition, increasing the amount of vitamins and minerals in crop products through genetic improvement, transgenic techniques and agronomic practices, while also providing other benefits such as improved yields, resistance to pests and diseases, and tolerance to water stress. In LAC, 14 of 25 national public research institutes are concentrating their efforts on biofortification (Henríquez, 2018).

On this basis, there are still challenges and needs for generating knowledge on how agriculture can favor improvements in nutrition. In this respect, FONTAGRO is announcing the Third Competition of successful cases of innovations in family farming, aimed at identifying and documenting successful experiences and lessons learned which contribute to a better understanding of how the process of innovation in agriculture favors improvements in the availability and nutritional quality of food. This competition will be held with sponsorship of HarvestPlus.

SECTION II. ABOUT FONTAGRO

FONTAGRO was created in 1998 with the aim of contributing to the sustainable management of natural resources, improvement of competitiveness and reduction of poverty, by developing technologies and innovations with relevance to society. It currently has a 15 member countries, and two sponsors, the Inter-American Development Bank (IDB) and the Inter-American Institute for Cooperation on Agriculture (IICA), the former being its legal representative.

2.2 To date, FONTAGRO has supported more than 135 projects and initiatives, representing a total investment of US\$106 million, of which US\$39 million (37%) was contributed by FONTAGRO and other strategic partners (IDB, CGIAR-World

Bank, AECI, Governments of Korea, Japan and New Zealand, among others); and US\$67 million (63%) as counterpart by the project executing institutions.

2.3 FONTAGRO co-finances initiatives that generate agricultural Regional Public Goods (RPG) for LAC. FONTAGRO and its sponsors promote opportunities so that countries that share growth and development challenges can be efficiently served by the institutions working in a collective, participatory and cooperative way. In that respect, the regional platforms promoted by FONTAGRO are, in themselves, an RPG as are the knowledge and lessons learned that they generate.

SECTION III. ABOUT HARVEST PLUS

HarvestPlus is a joint venture between institutes of the CGIAR system. Its vision is of a world free from “hidden hunger.” Hidden hunger can be solved by actively adding micronutrients to the diets of people with deficiencies. HarvestPlus and its partners develop new varieties of more nutritious crops to provide higher amounts of vitamin A, iron and zinc, the three micronutrients identified by the World Health Organization as the most deficient in diets around the world. HarvestPlus develops crop biofortification processes through genetic improvement, which complement other innovations whose purpose is to improve the nutrition of the population. HarvestPlus is supported by the Bill & Melinda Gates Foundation, the European Commission, UK Aid, MacArthur Foundation, and Feed the Future (United States) and is linked to 440 strategic agencies, creating one of the most important global alliances working in agriculture and nutrition. HarvestPlus’s mission is to develop, evaluate and release biofortified and nutritious crops; to do this, it implements projects in beans, maize, cassava, millet, wheat, sweet potatoes and rice, among others. Much of the progress achieved has been incorporated for scaling up by the public and private sectors.

SECTION IV. OBJECTIVE OF THE COMPETITION

Objective. The objective of this competition is to identify and document successful experiences and lessons learned that contribute to a better understanding of how the process of innovation in agriculture favors improved availability and nutritional quality of food, which can be replicated to other regions.

4.2 The background review provides examples of how improvements in nutrition can be brought about by actions in agriculture: i) genetic improvement of crops and animals along with adoption of sustainable management systems, ii) diversification of sources of proteins from agriculture and livestock (aquaculture, poultry, livestock, dairy) or the combination of both activities, iii) crop biofortification with vitamins and minerals and iv) diversification of agricultural production systems. Some systems of interest are described below (i) agricultural-livestock, agricultural/horticultural-forestry, apicultural-silvopastoral, or other similar systems, where there is complementarity of use of natural resources, reduction of the effects of the seasonality of production , and positive effects on food production and availability , (ii) vegetable gardens, seed banks managed by community associations which promote improvements in production, diversification and food availability, (iii) postharvest, storage, food preservation, development of new foods with traceability, and/or marketing, (iv) sanitary and agri-food management systems that improve food conditioning and reduce the potential for diseases both in production and along the value chain, (v) data management systems (big data), or other solutions of digital agriculture, knowledge dissemination and AgTechs which have a positive impact on productivity, supply and nutritional quality of food; (vi) programs of education, rural extension, and inclusion of gender and young people which promote organizational models and/or agricultural activities that improve the availability and quality of food; (vii) sustainable production and marketing systems with an impact on improving prices and producer income; (viii) development of local, regional or international policies and programs that include family farming practices and improve the supply and quality of food, for example, by reducing the variability of food prices.

SECTION V. ALLOCATION OF RESOURCES

This competition is funded by FONTAGRO and HarvestPlus, which may be supplemented with additional resources from other agencies related to FONTAGRO's mission.

5.2 The following categories will be awarded:

i. Category I. Producers associations and other organizations of the private sector working with producers in LAC.

ii. Category II. National public sector and non-governmental organizations in LAC.

iii. Category III. Regional or international sector working in LAC.

5.3 Special prizes will be awarded, one for each eligible category. The prize includes:

i. US\$5,000 for the researchers, producers, processors who participated in the case.

ii. US\$10,000 to strengthen the institutional capacity of the winning organizations.

iii. A trip to Washington DC to present the case (includes accommodation, round trip economy class and a small stipend for one person).

5.4 In addition, a recognition will be sent to the ten best cases selected through interviews which will be published on the FONTAGRO website and in social media.

5.5 Policies and conditions. The competition will be subject to the provisions detailed in the current [FONTAGRO Operations Manual \(MOP\)](#), IDB policies, and these Terms of Reference.

5.6 Additional sources of financing. This competition may have additional sources of funding if at the time of the final selection of cases other agencies are interested in co-financing them based on their regional priorities or other specific conditions.

SECTION VI. NOMINATION AND EVALUATION PROCESS

6.1 Opening of the competition. The competition will be open from **February 1 to June 17, 2019 at 12 PM Eastern Time**. Section VII details the relevant dates.

6.2 Preparation of a profile. A profile is a brief presentation of the successful case proposal. The profile must be prepared in Spanish following the Instructions of the Electronic Application Form for Successful Cases, which can be accessed on the FONTAGRO [website](#).

6.3 Presentation of profiles. The first phase is the presentation of profiles by the proposers. The case profiles must be submitted electronically on the form on the FONTAGRO website and sent by the deadline established in these Terms of Reference. Proposers are recommended to consult the [Instructions for preparation of the profile](#). Proposers may consult the Secretariat before sending the profile at email fontagro@iadb.org.

6.4 Criterios formales de elegibilidad. Los perfiles pueden ser presentadas por:

6.4 Formal eligibility criteria. The profiles can be submitted by:

- i. Producers organizations and/or private companies that work jointly with small farmers which operate in any IDB borrowing country, of Latin America, the Caribbean and/or Spain.
- ii. Any research and/or development organization that operates in any IDB borrowing country, of Latin America, the Caribbean and/or Spain which has developed experiences in those countries, irrespective of the source of funding.
- iii. Public-private research, development and innovation (R+D+i) platforms, involving government organizations (ministries), universities, agricultural research centers, producers, international centers, NGOs, among others.

6.5 Technical criteria for profile evaluation. The case profiles will be evaluated on the basis of the following criteria:

Qualitative:

- i. Regionality. The initiative must have been executed in at least one country in LAC and/or Spain.
- ii. Temporality. The initiative must have been executed in the last 15 years, and implemented jointly in a minimum period of three years.

iii. Identification of the beneficiaries. The innovation must directly involve small farmers as beneficiaries.

iv. Value chain approach. The innovation must be related to any aspect of the agri-food chain: production, post-harvest, industrialization, marketing, consumption.

v. Identification of benefits. The innovation must clearly indicate the benefits achieved in productive, economic, social, environmental aspects, and in diversification of the diet and/or nutritional value of the food for the beneficiaries.

vi. Scaling-up. The innovation must have the potential to be used in other regions of the world.

Quantitative:

vii. Concrete evidence of the size of impact: the case must provide validated quantitative evidence expressed in objective indicators of value creation and/or strengthening of nutrition and/or sustainability.

viii. Replicability. There must be concrete evidence to justify the replicability of the experience in similar situations or environments, at both regional and extra-regional levels.

ix. Learned lessons. Identification of lessons learned and opportunities for improvement.

6.6 Deadline. The closing date and time for profile submission is June 17, 2019 at 1 PM, Eastern Standard Time. After this date and time, sending of profiles will be automatically disabled. Profiles submitted by other means and formats or after the indicated closing date and time will not be accepted. Once submitted, profiles cannot be modified. It is recommended to send the profile in early.

6.7 Phase I of profile evaluation. The profiles will be evaluated initially by the Technical Administrative Secretariat (STA) and the sponsors of the competition, using the formal eligibility criteria mentioned above. Profiles meeting the formal eligibility criteria will be evaluated by an external panel, based on pre-established technical criteria. The panel will preselect at least ten of the best profiles.

6.8 External evaluation panel. This panel will be formed by specialists from the sector and representatives of the competition sponsors. The preselected cases will be cataloged and included in each of the established categories, based on their productive, economic, social, nutritional and environmental impacts.

6.9 Phase II of profile evaluation. In the second phase, at least the ten profiles that receive the best scores will be invited by the STA to prepare the case in a publishable format. The STA will facilitate preparation of the final cases, offering the support of consultants for writing and editing of cases, if necessary. The finalist cases must be sent by email to secretaria-ftg@iadb.org no later than August 17, 2019.

6.10 Phase III of profile evaluation. In the third phase, the ten cases will be evaluated externally by a panel of experts on the competition theme and representatives of the sponsors, and will be ranked by order of merit. The FONTAGRO Board of Directors will then review the scores of the ten cases and approve at least one outstanding case per eligible category. Once the cases are approved by the Board of Directors, the STA will inform the winners and the results will be published on the FONTAGRO website and social media.

6.11 Approval of awards. The FONTAGRO Board of Directors, at its Annual Meeting in October, will consider the recommendation of the external panel and approve selection of the awards and certificates of merit (if applicable).

6.12 Dissemination of products. At least the ten best cases will be included in a publication for international distribution in Spanish and English. The publication

will be presented at a special meeting to be organized at the IDB Headquarters in Washington, DC, in which representatives of international organizations and governments will participate, along with the winning cases. In addition, materials will be prepared to disseminate the cases on the websites of FONTAGRO and other partner institutions, and discussion forums will be held to disseminate the cases and their lessons learned.

TIMELINE

Activity	Schedule
Announcement of the Competition on the FONTAGRO website and dissemination	January
Phase 1: Opening of submission of profiles (13 weeks)	February 1 to June 17
Close	June 17
Selection process of ten of the best profiles (6 weeks)	June 17 to July 17
Send invitation to at least ten selected profiles	July 19
Phase 2: Preparation of at least ten successful cases (4 weeks)	July 17 to August 17
Acceptance of at least ten cases	August 17
Phase 3: External Evaluation Panel of finalist cases (4 weeks)	August 17 to September 17
Presentation to FONTAGRO Board of Directors	October
Announcement of winning cases	2019
Preparation of publication and visual media	2019-2020
Celebration in Washington DC	April 2020

INFORMATION AND CONSULTANTS

FONTAGRO

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