

Agropolis Fondation 2020 Call for Proposals (CfP)  
[Ref. CfP 2001]

## **"Climate change, biodiversity, food systems: Agriculture-Based Solutions"**

### **TERMS OF REFERENCE**

#### **I- Context and background**

The globalization of narratives, practices and institutions (values, norms, rules) affects agriculture as a whole and at many levels on spatial, temporal and jurisdictional scales<sup>1</sup>. At the same time, agricultural, forestry and other land-use activities are among the main drivers of climate change<sup>2</sup> and biodiversity loss<sup>3</sup>.

Global agriculture policies are now facing major challenges: nourishing an increasingly urbanized world population that is expected to grow by nearly 2 billion by 2050, while responding to the major challenges of climate change and biodiversity loss. At the same time, there is a growing consensus on the importance of using the "food system" approach to address various segment of the food production and consumption, transformation and consumption<sup>4</sup>. Food systems also face increasing societal demand to become more responsible by reducing negative externalities on the environment and human health, among others.

Thus, more and more Science-Policy platforms and think-thanks (e.g., IDDRI, Belmont Forum, One Earth, FAO, etc.) advocate for a transformative society to face those multidimensional changes and global challenges.

Scientists play a key role in various reflections, discussions and actions which contribute to addressing the challenge of agro-ecological transition by promoting practices and solutions which conserve natural renewable resources and lead to more desirable socio-ecosystems. One way of achieving this is mobilizing research, higher education and training towards addressing the Sustainable Development Goals (SDGs).

Given this context, and in order to effect transformative change, there appears to be a growing awareness towards agriculture-based solutions within the foundation's research community which:

- 1) Veer away from conventional or high-input agriculture towards a more sustainable-oriented model, for a stronger contribution to the agro-ecological transition;
- 2) Support scientific excellence and training to fill Knowledge-Action Gaps and co-design desirable solutions with stakeholders in agriculture;
- 3) Address the Sustainable Development Goals (SDGs) in a crosscutting perspective and not in silos<sup>5</sup>;

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<sup>1</sup> Cash, D. W., W. Adger, F. Berkes, P. Garden, L. Lebel, P. Olsson, L. Pritchard, and O. Young. 2006. Scale and cross-scale dynamics: governance and information in a multilevel world. *Ecology and Society* **11**(2): 8. [online] URL: <http://www.ecologyandsociety.org/vol11/iss2/art8/>

<sup>2</sup> The latest Inter-governmental Panel on Climate Change (IPCC) report (<https://www.ipcc.ch/report/srcccl/>) showed that agricultural, forestry and other land-use activities accounted for about 23% of total net anthropogenic GHG emissions.

<sup>3</sup> The last Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report explained that more than a third of the world's land surface and nearly 75% of freshwater resources are now devoted to crop or livestock production (<https://ipbes.net/news/Media-Release-Global-Assessment>).

<sup>4</sup> Mbow, C., C. Rosenzweig, L.G. Barioni, T.G. Benton, M. Herrero, M. Krishnapillai, E. Liwenga, P. Pradhan, M.G. Rivera-Ferre, T. Sapkota, F.N. Tubiello, Y. Xu, 2019: Food Security. In: *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*.

<sup>5</sup> Wang, C., Guan, D., & Cai, W. (2019). Grand Challenges Cannot Be Treated in Isolation. *One Earth*, *1*(1), 24-26. doi:10.1016/j.oneear.2019.08.005

- 4) Promote new and/or scale up good practices (nature-based solutions, ecological intensification) and approaches for addressing the complex interactions of SDGs (e.g. sustainability science<sup>6</sup>, transformative science<sup>7</sup>, integrated, interdisciplinarity or participatory science, problems-oriented approach and solutions-driven approach).

The consultation process within its research network initiated by Agropolis Fondation since the beginning of 2019 saw discussions about the network's strengths and weaknesses. It also led to the collective identification of key research issues and challenges regarding the Foundation's scope, key research fronts to further develop and explore as well as scientific certainties and controversies for debate.

With the overall objective of promoting agro-ecological transition for tomorrow's agricultures, the Foundation will endeavour to work on three crosscutting axes, namely:

- Axis 1: Agriculture and climate change: adaptation and mitigation;
- Axis 2: Conservation and sustainable use of biodiversity;
- Axis 3: Responsible production and consumption.

This overall orientation of the Foundation has been endorsed by the Foundation's Charter members and by its Science Council. It is intended to provide a framework for actions to be supported by the Foundation. This call is also designed in complementarity with Calls from ANR or Belmont Forum<sup>8</sup>, aligned with the Sustainable Development Goals (SDGs).

## **II- Objectives of the call**

Research teams are encouraged to apply and position themselves in at least 1 axis and, if possible, the nexus of 2 or 3 axes by: 1) Identifying the best axis representing their field of research; 2) interrogating the stakes affected by their research work; and 3) interrogating the interactions and potential contradictions between SDGs and the Foundation's three cross-cutting axes.

The Foundation seeks to encourage and mobilize a combination of disciplines, revisit their research practices and ways of building research projects. Proposals should include new (to the extent possible) collaborations (or reinforce existing ones) between researchers, disciplines, approaches and methodologies (including participatory research involving key stakeholders) so as to tackle, directly or indirectly, sustainable development challenges.

## **III- Thematic coverage**

The present Call for Proposals (CfP) builds on the results of the aforementioned scientific consultation process. Its generally broad scope is designed to generate proposals addressing the various themes identified under each of the three crosscutting axes, which are fully aligned with Sustainable Development Goals, particularly SDGs 12, 13 and 15.

### **Axis 1: Agriculture and climate change: adaptation and mitigation**

Under this axis, the aim is to understand the effects of climate change on agricultural systems (from genes to landscapes, from local to international levels, and from short-term to long-term) and to explore/propose adaptation strategies and mitigation measures. Among the key issues, the following themes may be the subject of research and training proposals:

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<sup>6</sup> « Sustainability science is problem-driven, interdisciplinary scholarship that seeks to facilitate the design, implementation, and evaluation of effective interventions that foster shared prosperity and reduced poverty while protecting the environment. It is defined by the problems it addresses rather than the disciplines it employs. It thus draws as needed from multiple disciplines of the natural, social, medical and engineering sciences, from the professions, and from the knowledge of practice ». (*Harvard Univ., 2008*)

<sup>7</sup> "A specific type of science that does not only observe and describe societal transformation processes, but rather initiates and catalyses them. Transformative science aims to improve our understanding of transformation processes and to simultaneously increase societal capacity to reflect on them" in: Schneidewind U., M. Singer-Brodowski, K. Augenstein, F. Stelzer, 2016, *Pledge for a Transformative Science: A Conceptual Framework*. Wuppertal Papers No. 191. Wuppertal Institut, p. 6.

<sup>8</sup> "BiodivERsA", "Climate, Environment and Health", "Cultiver et Protéger autrement"

- Interactive biotic and abiotic stresses on plants, animals and other living organisms, and risks associated with political, social and economic factors;
- Socio and agro-ecosystem co-viability and co-benefits, synergies, tensions, trade-offs;
- Vulnerability and resilience of territories: tools, practices, strategies, policies;
- Enhanced crop-livestock integration.

### **Axis 2: Conservation and sustainable use of biodiversity**

Under this axis, the aim is to document and analyse the measures and policies that support the conservation, and promote sustainable use of biodiversity in various agroecosystems. Among the key issues, the following themes may be the subject of research and training proposals:

- The links between biophysical functions and biodiversity: study of the microbiota, crop associations, wild, domestic, improved and hybrid biodiversity, etc.;
- Agrobiodiversity through its ecological, economic and sociocultural functions;
- Studies including controlled conditions, field experiments and real agrosystems;
- Interactions between biodiversity, food security and plant health;
- Policies (from conservation to exploitation, from local to international scales) on practices and territories: land tenure, use and access rights, protected areas, sustainable use/management, biodiversity offset, Payment for Ecosystem Services, etc.

### **Axis 3: Responsible production and consumption**

Under this axis, the aim is to contribute in ensuring sustainable food system by moving towards more responsible production and consumption. Among the key issues, the following themes may be the subject of research and training proposals:

- Food environments: food landscapes, food deserts, food swamps;
- Co-designing agro-ecosystems with stakeholders (e.g., farmers, policy-makers, experts, etc.);
- Governance of sustainable food systems (certification and quality of production, public regulations, role of companies, coordination of sectors);
- Bio-economy in circular economy in food and non-food system, to include, among others efficient waste and resource management;
- Animal and/vs plant-based proteins (food transition);
- Innovation and socio-ecological transition.

## **IV- Eligibility**

1. A submitted proposal should tackle at least one of the crosscutting axes presented in Section III.
2. The lead proponent should be from one of the research units belonging to the Foundation's scientific network (Labex Agro)<sup>9</sup>.
3. Scientists from research units or institutions outside of the Foundation's scientific network can participate as partners.
4. A scientist can coordinate only one project funded under this specific CfP.

## **V- Project types, cost and duration**

5. Up to **750k€** is available for this CfP which will fund two types of projects presented below.

- a. Type 1 projects** are those with funding level of 150k€ (minimum) to 250k€ (maximum). It may include support to any or a combination of the following funding categories:
- Short stay mobility (one week to one month)
  - Long stay mobility (one month to one year)
  - Post-doctoral Fellowship

<sup>9</sup> For the list of the Foundation's research units, please visit <http://www.agropolis-fondation.fr/Unites-de-recherche>. Interested parties are highly encouraged to contact directly the concerned research unit(s) in writing.

- Doctoral Fellowship
- Support for education and training oriented initiatives
- Educational innovation (integration of innovative modules into the existing training curriculum)
- Online courses (MOOC or others)
- Support for the animation of the scientific community of the network
- Publication and dissemination of research results
- Hosting pre-doctoral students

Level of funding per project: From 150k€ (minimum) up to 250k€ (maximum)

Overall funding available: 450k€ - 600k€

Project duration: Maximum 36 months

**b. Type 2 projects** are small initiatives ranging from 20k€ (minimum) to 25k€ (maximum).

It may include request to support any of the following:

- Small exploratory, risky and innovative projects for research or training (proof of concept, new frontier research, etc.)
- Support for the animation of the scientific community of the network
- Hosting pre-doctoral students
- Educational innovation (integration of innovative modules into the existing training curriculum)

Level of funding per initiative: 20k€ (minimum) up to 25k€ (maximum)

Overall funding available: 120k€ - 150k€

Project duration: Maximum 1 year

## **VI- Eligible expenditures**

6. Eligible costs for each funding category are restricted to expenditures directly related to the project, such as:
  - Personnel recruitment costs (temporary personnel to be specifically involved in the project)
  - Consultancies and services subcontracted specifically for the project
  - Limited consumable items<sup>10</sup>
  - Publication and dissemination costs, including cost related to organization of events
  - Travel expenses
  - Overheads (max 8% of the grant amount for each partner)

All the expenses must comply with ANR Financial Regulation (IDEX).

(<https://anr.fr/fileadmin/documents/ia-rf-idex.pdf>).

7. No more than 30% of the total grant should be transferred to partners outside of the Foundation's scientific network (Labex Agro), to external service providers or to consultants.
8. Non-eligible costs include items such as:
  - Expenditures linked to internal services
  - Salaries of staff that are not specifically recruited for the project
  - Expenditures linked to existing infrastructure
  - Expenditures already funded through other sources
9. The project's full cost must be presented including counterparts from the applicants and their partners in the Financial Annex.

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<sup>10</sup> Only consumables related to the project are eligible. As stipulated in the ANR rules, « only depreciation rates corresponding to the duration of the project are eligible » for the purchase of materials and equipment.

10. In the case of a proposal that is only partially funded through this CfP, the proponents should provide all elements concerning funding of the other part of their project (acquired, submitted, and/or planned funding request). Funding under this Call is conditional; subject to the proponents' success in mobilizing the necessary funding required to complete the overall project.
11. In the case of a proposal that is a standalone project contributing to a larger project or programme, the proponents should provide all elements concerning the objectives, organization and overall funding of the larger project (i.e., acquired, submitted, and/or planned funding request).

### **VII- Evaluation process and criteria**

12. Eligible **Type 1** proposals shall be evaluated by external experts and shall be reviewed by the Foundation's Science Council (SC) on the basis of the criteria below:
  - Adequacy with the call
  - Scientific quality, overall coherence and feasibility (i.e., clarity of objectives and expected outputs, robust methodology, proposed timetable, project leadership, etc.)
  - Budget adequacy
  - Originality and innovativeness
  - Quality of partnership and collaboration (i.e., role of partners in the project conception, implementation and management; potential involvement of actors from the South; potential collaborations with other Labexes in Montpellier or elsewhere; clarity and fairness of data and knowledge sharing, exchange and management mechanism across partners)
  - Structuring effect of the project within the Labex Agro community and complementarities with existing initiatives
  - Visibility and international dimension and potential benefits for developing countries (e.g., accessibility, relevance of the topic, etc.)
  - Project trajectory (i.e., strategic positioning and ambition) and sustainability (how will the proposed actions be sustained beyond project funding and how will these be mainstreamed in the activities of the institution)
  - Strong justification as to why the Foundation, through its Label Agro programme, should fund the proposed project
  - Project's potential leverage effect
  - Clarity of project management and coordination
  - Gender balance
13. Proposals for **Small initiatives (Type 2)** shall be evaluated by the Foundation's Science Council on the basis of the following criteria:
  - Scientific quality, overall coherence and feasibility (i.e., clarity of objectives and expected outputs, robust methodology, proposed timetable, project leadership, etc.)
  - Budget adequacy
  - Strategic nature of the proposed action (in terms of topic, scientific lock, partnership, etc.)
  - Originality and innovativeness
  - Strong justification as to why the Foundation, through its Labex Agro programme, should fund the proposed project, potential leverage effect, feasibility

### **VIII. Submitting proposals, timetable and requirements**

- 1) All submitted proposals must be written in English.
- 2) Proponents should submit a duly completed Application Form, including applicable annexes.
- 3) All proposals must be submitted electronically, by the specified deadline, via the link <https://agropolisfondation.optimytool.com/en/>

- 4) Agropolis Fondation shall not be held responsible for submissions not received due to technical problems preventing the transfer of proposals electronically.
- 5) By submitting a proposal, the proponents assure that they have obtained the due approval of all the participants involved in the project. The application form should bear the signature of the head of the research unit/institution of the (co-) leaders (use the template provided in the annex).
- 6) Please note that all proposals received under this CfP shall be archived and could be used by Agropolis Fondation for analysis in the context of its activities. Except for the Abstract, a proposal shall not be shared with a Third Party without prior consent of its proponent.
- 7) If the project is selected, the project leader commits to the following, in addition to other contractual obligations to be reflected in the Grant Agreement: (a) Cite the support of Agropolis Fondation through Labex Agro in any communication coming from the project (scientific publications, oral communications, book chapters, etc.)<sup>11</sup>; (b) provide the foundation with all communication materials it may need; and (c) ensure a regular and quality interaction with the Foundation team.
- 8) Below is the timetable for this Call:

06 December 2019	Opening of the Call for Proposals
03 March 2020, 11.59 PM	Deadline for the submission of proposal <i>Late and/or incomplete submissions will not be accepted.</i>
Mai 2020	Publication of results (selected proposals)

**Documents available online**

All documents related to the present Call for Proposals are available online at the following website:  
<https://agropolisfondation.optimytool.com/en/>

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<sup>11</sup> « Ce travail a bénéficié d'une aide de l'état générée par l'agence nationale de la recherche au titre du programme "Investissements d'avenir" portant la référence ANR-10-LABX-001-01 Labex Agro et coordonnée par Agropolis Fondation / This work/project was publicly funded through ANR (the French National Research Agency) under the "Investissements d'avenir" programme with the reference ANR-10-LABX-001-01 Labex Agro and coordinated by Agropolis Fondation »)