



Agropolis Fondation 2020 Call for Proposals (CfP) [Ref. CfP 2002]

In partnership with



"Innovative Co-Learning for Agriculture-based Solutions"

TERMS OF REFERENCE - 2nd round

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 scales¹. At the same time, agricultural, forestry and other land-use activities are among the main drivers of climate change² and biodiversity loss³.

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. Moreover, there is a growing consensus on the importance of using the "food system" approach to address various segments of the food production, transformation and consumption⁴. 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 resources and lead to more desirable socio-ecosystems. One way of achieving this is through crosscutting disciplines, methodologies and approaches in addressing the Sustainable Development Goals (SDGs).

The consultation process within its research network, initiated by Agropolis Fondation in 2019, led to the collective identification of key research issues and challenges regarding the Foundation's scope. This aligns with the key research questions to guide further development based on scientific certainties and controversies. The consultation helped define the overall objective of promoting agro-ecological transition for tomorrow's agricultures, and the 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 both by its Charter members and its Science Council.

¹ 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/

² The latest Inter-governmental Panel on Climate Change (IPCC) report (https://www.ipcc.ch/report/srccl/) showed that agricultural, forestry and other

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

³ The last Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report explained that more than a third of the world's

³ 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).

^{**}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.

II- Objectives of the Call

As a result of the above-mentioned consultation process, the Foundation launched a first Call for Proposals (primarily targeting research but also including training and innovation) entitled "Climate change, biodiversity, food systems: Agriculture-Based Solutions" which resulted in the selection of nine projects.⁵ As its title implies, the Call underscored the need to implement solutions that hinge on agriculture, particularly on agro-ecology, co-designed with stakeholders in order to address the nexus of SDGs (and not in silos⁶), and which require questioning complex interactions of SDGs (e.g. sustainability science⁷, transformative science⁸, integrated, interdisciplinarity or participatory science, problem-oriented solution-driven approaches).

These kinds of approaches are not easy to put in place. They require building new collaborations across disciplines and/or stakeholders for co-learning in order to trigger transformation (i.e. cross-learning between researchers from different disciplines, between academic and non-academic actors, between researchers and PhD students). Mutual learning is seen as a way to establish dialog between scientific and non-scientific knowledge, between various branches of science and between science policy, civil society and private actors. In pursuing agro-ecological transition for tomorrow's agricultures, there are many aspects of knowledge that are chattered or bridled, limiting active engagement of actors for suitable implementation of the concepts. Knowledge system is not enough. Without a protracted learning system, including bottom-up knowledge sharing, the implementation gap will remain for a long time.

Building on the above and in complementarity with Calls issued by the I-Site MUSE⁹ and others (ANR, Belmont Forum¹⁰, Fondation de France & Fondation Carasso...), this current Call therefore aims to capitalize on, enhance or strengthen such practices and make them more visible, as well as to explore new transdisciplinary, crosscutting or resolutely different methodologies, tools, approaches and sectors. It aims to support innovative, inter-sectoral and cross-disciplinary learning, for promoting agroecological transition through transformative approaches and tools, innovative teams and networks.

This will be carried out by funding different types of actions (i.e., Twin postdocs, partial PhD fellowships, young scientists, summer schools) in support of research and training through research, in partnership with the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) and Biovision Foundation.

For all these types of action, the Foundation seeks to encourage and mobilize a combination of disciplines, approaches or methodologies (Ref: Section V).

III- Thematic coverage

The present Call covers the three crosscutting axes of the Foundation. Its generally broad scope is designed to generate proposals addressing the various themes identified under each of them and which are fully aligned with Sustainable Development Goals (SDGs), 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:

- 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.

⁵ Eligible proposals submitted under this Call were evaluated during the April 2020 meeting of the Foundation's Science Council, the results of which were published in May 2020. ⁶ 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

⁷ « 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)

and from the knowledge of practice ». (Harvard Univ., 2008)
8 "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.

⁹ https://muse.edu.umontpellier.fr/app/

^{10 &}quot;BiodivERsA", "Climate, Environment and Health", "Cultiver et Protéger autrement"

Axis 2: Conservation and sustainable use of biodiversity

Under this axis, the aim is to document and analyze 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 systems 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 systems, to include, among others, efficient waste and resource management;
- Animal and/vs plant-based proteins (food transition);
- Innovation and socio-ecological transition.

IV- Eligibility

- A submitted proposal must tackle at least one of the crosscutting axes presented in Section III above.
- 2. A submitted proposal must (a) choose just one type of action under this Call; (b) tackle the thematic coverage of the type of action for which funding is being applied for; and (c) meet the conditions specified for a given type of action (Ref: Section V).
- 3. The lead proponent must be from one of the research units belonging to the Foundation's scientific network (Labex Agro).
- 4. Scientists from research units or institutions outside of the Foundation's scientific network can participate as partners.
- 5. A scientist can coordinate only one project funded under this specific CfP.

V- Type of actions, conditions, costs and duration

More than **750k** $\mathfrak C$ are available for this CfP (two rounds). The first round was complemented by partial postdoc co-funding by FRB/Cesab (valued at 65k $\mathfrak C$) and one Summer/Winter/Thematic School by Biovision Foundation (valued at 10k $\mathfrak C$).

For this second round, the Foundation is partnering with SEARCA in co-supporting PhD fellowships and up to two Summer/Winter/Thematic Schools (valued at around $150k \in$). Biovision Foundation is cofunding one more Summer/Winter/Thematic Schools (valued at $10k \in$).

Presented in the succeeding table are the various categories of actions supported under this Call.

Type of action, cost and duration	Funding conditions/specific remarks
Post-doctoral Fellowship Overall funding available for the 2nd round: 255k€ Total number of Fellowships available: 3 Maximum funding per project: 65k€ (equivalent to 50% of 18-month Postdoc funding) Project duration: 4 months to 18 months	 Request for minimum of 4 months of Postdoc funding and a maximum of 18 months can be considered under this type of action: Support for Postdoc at 100% AF funding request should be for a minimum of 4 months (within the maximum funding of 65 k€); Support for an 18-month Postdoc is under 50% cofunding set-up; the complementary partial funding (50%) must be secured within 6 months after the selection of the project. Proposal should involve at least 2 research units within the Foundation's scientific network.
Partial doctoral Fellowship (50%) Overall funding available for the 2nd round: 134k€ Total number of Fellowships available: 2 Maximum funding per project: 68k€ Project duration: 36 months	 Complementary funding (50%) must be secured within 6 months after the selection of the project; Two supervisors from different but complementary disciplines or backgrounds.¹¹
Co-funded doctoral Fellowship with SEARCA Overall funding available: 272k€ Total number of Fellowships available: 2 Maximum funding per project: 136k€ based on a 50:50 co-funding between AF and SEARCA Project duration: 36 months	 For this category, applications must meet the following conditions and eligibility: Research proposal (i.e., PhD research topic) must be developed and submitted jointly by a French scientist/professor belonging to Agropolis Fondation's network and a Southeast Asian scientist/professor¹² from any of the five SE Asian universities covered by this CfP¹³. A French or SE Asian scientist/professor can cocoordinate/co-supervise only one project funded through this Call. He/she may, however, be involved as a partner in other projects funded through this Call. The two co-supervisors must both agree (or have agreed) to co-supervise a PhD research and must possess the required qualifications (e.g., HDR or an agreement by the relevant <i>Ecole Doctorale</i> in the case of French scientists/professors) to supervise a doctoral student. The two co-supervisors must have already identified a PhD who will have completed the first part of his/her doctoral training in one of the five SE Asian universities covered by the CfP. The research topic clearly contributes to reinforcing French-Southeast Asian scientific cooperation. Should the research project involve any case studies, such must be carried out in Southeast Asia and must involve partners from concerned country (-ies). If of equivalent scientific quality, preference will be given to a proposal that enables first-time partnership between research teams.

But not necessarily as PhD co-supervisor.
 Click here to access a non-exhaustive list of potential Southeast Asian partner researchers/scientists/faculty members.
 These include: Universitas Gadjah Mada (Indonesia), Institut Pertanian Bogor (Indonesia), Kasetsart University (Thailand), Universiti Putra Malaysia, and UP Los Banos (The Philippines).

Type of action, cost and duration	Funding conditions/specific remarks
Young scientist-led project Overall funding available for the 2nd round: 60k€ Maximum number of projects to be funded: 3 Funding per project: 20k€ (max) Project duration: 12-18 months	 A Young scientist is an early career scientist, researcher or lecturer in a permanent position with a PhD obtained in the last 10 years and who is under 40 years old¹⁴ by the CfP deadline; Due consideration will be accorded to female candidates who have had maternity leave(s) in the course of their career; Proposed projects should be cross-disciplinary and explore the use of innovative tools and methods in its implementation.
"Summer/Winter/Thematic School" Overall funding available for the 2nd round: 40k€ - 60k€ Maximum number of projects to be funded: 2 to 3 Funding per project: 20k€ (max) Project duration: 12 months For this second round, 1 Summer school is available for co-funding with Biovision, up to 2 Summer schools may be co-funded with SEARCA and 1 for full-funding by Agropolis Fondation	 For all applications: a) Proposed training sessions should gather scientists, education specialists, students, professionals from various disciplines, sectors and thematic domains around a common scientific topic, in order to facilitate training, learning of new concepts, methods and tools, ways of setting up transdisciplinary projects, knowledge sharing, as well as to stimulate interactions, exchanges and further collaborations; b) Exchanges across disciplines in tackling any of the crosscutting axes and in relation to the SDGs; c) In the light of COVID-19 pandemic, proposal must include contingency measures (e.g., schedule options, use of online tools, etc.). For applications that do not involve any co-funding, proposals should involve at least 2 units within the Agropolis Fondation network. For applications involving co-funding with Biovision Foundation, the following specific conditions apply: a) Proposal must be co-submitted by a Sub-Saharan African institution (research organization, university, civil society organization,) b) Summer schools should have at least 60% participants from Sub-Saharan Africa. For applications involving co-funding with SEARCA, the following specific conditions apply: a) Proposal must be co-submitted by a Southeast Asian researcher, scientist, lecturer, or (assistant) professor from any of the five SE Asian universities covered by this CfP¹³. b) Summer schools should have at least 60% participants from SE Asian.

VI- Eligible expenditures

1. Eligible costs for each funding category are restricted to expenditures directly related to the project (See next table).

 $^{^{14}}$ "Young scientists" currently represent $\sim\!20\%$ of Agropolis Fondation's research network workforce.

Type of action, cost and duration	Eligible costs ¹⁵
Post-doctoral Fellowship	For less than 18 months (min. of 4 months and within the 65k€ funding limit) • Postdoc salary with a minimum of 4 months • Research environment which can be used to partially cover publication and dissemination costs, limited consumable items, travel expenses • 8% overhead cost (max 6% of the grant amount shared among research units involved; 2% to be retained by Agropolis Fondation (AF) for grant management and monitoring)
	For partial Post-doctoral Fellowship (50%, within the 65k€ funding limit) • 50% of the Postdoc salary over 18 months (45k€) • 50% of research environment which can be used to partially cover publication and dissemination costs, limited consumable items, travel expenses (15k€) • 8% overhead cost (max 6% of the grant amount shared among research units involved; 2% to be retained by AF for grant management and monitoring)
Partial doctoral Fellowship (50%)	 50% of the PhD salary over 18 months (52,5k€) 50% of research environment which can be used to partially cover publication and dissemination costs, limited consumable items, travel expenses (10k€) 8% overhead cost (max 6% of the grant amount shared among research units involved; 2% to be retained by AF for grant management and monitoring)
Co-funded doctoral Fellowship with SEARCA	 100% of the PhD salary over 18 months (52,5k€) 100% of research environment which can be used to partially cover publication and dissemination costs, limited consumable items, travel expenses (20k€) 8% overhead cost (max 6% of the grant amount shared among research units involved; 2% to be retained by AF for grant management and monitoring)
Young scientist-led project	 Consultancies and services subcontracted specifically for the project Limited consumable items Publication and dissemination costs, including cost related to organization of events Travel expenses 8% overhead cost (max 6% of the grant amount shared among research units involved; 2% to be retained by AF for grant management and monitoring)
"Summer/Winter/Thematic School"	 Consultancies and services subcontracted specifically for the project Publication and dissemination costs, including cost related to organization of events Travel expenses 8% overhead cost (max 6% of the grant amount shared among research units involved; 2% to be retained by AF for grant management and monitoring)

¹⁵ Only consumables related to the project are eligible. As stipulated in the ANR rules, « only depreciation rates corresponding to the duration or the project are eligible » for the purchase of materials and equipment.

All the expenses must comply with ANR Financial Regulation (IDEX). (https://anr.fr/fileadmin/documents/ia-rf-idex.pdf).

- 2. No more than 30% of the total grant contribution from Agropolis Fondation should be transferred to partners outside of the Foundation's scientific network (Labex Agro), to external service providers or to consultants.
- 3. 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.
- 4. The project's full cost must be presented including counterparts from the applicants and their partners in the Financial Annex.
- 5. 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.
- 6. 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

- 1. Eligible proposals for **Postdocs and PhD Fellowships** shall be evaluated by the Foundation's Science Council (SC), potentially with the support of external reviewers, on the basis of the following criteria:
 - Adequacy with the Call
 - Scientific quality, overall coherence and feasibility (i.e., clarity of objectives and expected outputs, robust methodology, proposed timetable including considerations of current COVID-19 pandemic, project management and structure, etc.)
 - Co-learning aspects (i.e. degree of interaction and exchange among scientists from various disciplines and actors from different sectors)
 - 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)
 - 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 Labex Agro programme, should fund the proposed project
 - Profile of the Postdoc/PhD candidate and potential professional trajectory
- 2. Eligible proposals for small **Young scientist-led projects** shall be evaluated by the Foundation's Science Council (SC) on the basis of the following criteria:
 - Adequacy with the Call
 - Scientific quality, overall coherence and feasibility (i.e., clarity of objectives and expected outputs, robust methodology, proposed timetable including considerations of current COVID-19 pandemic, project management and structure, etc.)
 - Co-learning aspects (i.e. degree of interaction and exchange among scientists from various disciplines and actors from different sectors)
 - 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)
 - Project's potential leverage effect
 - Visibility and international dimension

- Young scientist's profile and potential professional trajectory
- 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 Labex Agro programme, should fund the proposed project
- **Budget adequacy**
- 3. Eligible proposals for the organization of "Summer/winter/thematic Schools" shall be evaluated16 by the Foundation's Science Council on the basis of the following criteria:
 - Strategic nature of the training course (e.g., transformative and systemic character of the methods and topics covered, target participants, partnership, etc.)
 - Originality and innovativeness of the training course (i.e., topic, approach, etc.)
 - Co-learning aspects (i.e. degree of interaction and exchange among scientists from various disciplines and actors from different sectors)
 - Potential structuring effect and complementarities with other training courses
 - Potential to attract international participants
 - Partnership with other training and higher education institutions
 - Sustainability (i.e., How will the proposed training be sustained beyond project funding? What actions shall be taken to make sure that this will not be a one-time operation?)
 - Strong justification as to why the Foundation, through its Labex Agro programme, should fund the proposed project, potential leverage effect
 - Project management and structure
 - Budget adequacy
 - Feasibility considering current COVID-19 pandemic

VIII-Submitting proposals, timetable and requirements

- 1. All submitted proposals must be written in English. Proponents should submit a duly completed Application Form, including applicable annexes.
- 2. All proposals must be submitted electronically, by the specified deadline, via the link https://agropolisfondation.optimytool.com/en/
- 3. Agropolis Fondation shall not be held responsible for submissions not received due to technical problems preventing the transfer of proposals electronically.
- 4. 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).
- 5. 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.
- 6. 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.)¹⁷; (b) provide the Foundation with all communication materials it may need; and (c) ensure a regular and quality interaction with the Foundation team.
- 7. Presented below is the timetable for this second round. Selected projects are expected to be implemented in the second half of 2021.

¹⁶ In the case of applications with Biovision Foundation co-funding, an adhoc committee composed of representatives from their respective Science

Councils will be in-charge of reviewing eligible proposals.

17 « 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 ») - Acknowledgment statement to be revisited depending on co-funding arrangements.

01 March 2021, 23:59 (Paris time)	Deadline for the submission of proposal for the second round
	Late and/or incomplete submissions will not be accepted.
April 2021	Proposal evaluation
May 2021	Publication of results (selected proposals)

8. Selected projects may be required to develop a Data Management Plan.

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

Contacting potential Southeast Asian partners:

- Click here to access a non-exhaustive list of Southeast Asian researchers/scientists/faculty members.
- You can contact anyone of them directly, cc to gsid@searca.org or seek assistance by sending an email to the Graduate Scholarship and Institutional Development Unit of SEARCA at gsid@searca.org

Contacting potential Sub-Saharan African partners:

- Click <u>here</u> to access a non-exhaustive list of Sub-Saharan African partners.
- You can contact anyone of them directly, cc to Matthias Geck of Biovision Foundation at m.geck@biovision.ch .