





TRIPARTITE CALL FOR PROPOSALS

Thought for Food¹ Initiative

Transdisciplinary research towards more sustainable food systems
[Ref. CfP 2015-07]

TERMS OF REFERENCE FINAL VERSION 01 DECEMBER 2015

I. Introduction

Agropolis Fondation², Fondazione Cariplo³ and Fondation Daniel et Nina Carasso⁴ signed in October 2015 a Partnership Agreement expressing common objective of contributing to address sustainability of agriculture and food systems issues by collectively supporting international scientific projects from developed and developing countries.

Under the overall theme of "sustainable agriculture and food systems," the *Thought for Food*⁵ initiative Open Call for Proposals covers two strands ⁶, namely: (a) Diverse agricultural production for more sustainable food systems and diets; and (b) sustainable food processing for more sustainable and healthy diets.

Under this collaboration, the three European foundations will support collaborative and multidisciplinary scientific research projects and research projects with a capacity building component in a common effort to contribute to the understanding and promotion of a holistic approach to sustainable food systems.

For the purposes of this Call, food systems refer to all processes, actors, institutions and interactions involved in feeding a population. They include the required inputs (e.g., seeds,

¹ Derived from the metaphor "food for thought," which implies providing mental stimulus for thinking, the phrase was deliberately inverted to highlight the collective need to reflect, generate and use knowledge in order to improve the way food is produced.

² Agropolis Fondation is a French foundation for scientific cooperation established in 2007 to promote and support high-level research and higher education (training-through-research) as well as to broaden international partnerships in agricultural sciences and sustainable development research. It supports a research network with scientists working on a continuum of multidisciplinary knowledge - from the study of genetics to agro-ecosystems to final use of agricultural products and interaction between agriculture and society; and with recognized expertise over numerous plant species from temperate, Mediterranean and tropical areas.

³ Fondazione Cariplo is an Italian private philanthropic foundation established in 1991, operating on the basis of the principle of subsidiarity, anticipating needs and fulfilling its mission of being a resource for the social and civil organizations and help them better serve their community. In the research field the foundation promotes networks and partnerships, participation in international projects, human capital growth, facilitates innovation as well as scientific communication and dissemination of research outcomes. Among others, the foundation supports projects in the agro-food sector with the final aim of contributing towards sustainable production and consumption systems, while improving quality and productivity, as well as safety of the final products.

⁴ Fondation Daniel et Nina Carasso is a French-Spanish family philanthropic foundation established in 2010. Under the aegis of the Fondation de France, it funds projects in two areas of great importance for human development: food to sustain life and art to nourish the mind. The Foundation funds projects foremost in France and Spain, but recognizes that the stakes are global in scope; and that research and advocacy could be more powerful if international collaborations are pursued. Its International Program on Sustainable Food Systems and Diets funds international research projects globally and those that promote transdisciplinary approaches to food systems that break down silos between disciplines, include stakeholder's knowledge and tackle all dimensions of sustainability in an integrated way.

⁶ A third thematic strand "Towards sustainable urban food systems" will be addressed through a commissioned process.

infrastructure, knowledge, financing,) and generated outputs (e.g., wastes, food products,), activities and services with both their positive and negative impacts along the different stages of the value chain (i.e., production, processing, distribution, preparation, consumption and disposal of food waste). As food systems operate within and are influenced by the social, cultural, political, economic and environmental contexts, the challenge is how to make such systems more efficient, sustainable, equitable and supportive of healthy diets.

II. Objectives and thematic coverage of the Call

- This Call aims to (a) advance understanding of the sustainability of food systems and explore innovative solutions that could help actors involved to achieve it; (b) facilitate the emergence of excellent, new and high-impact research activities; and (c) generate a leverage effect that encourages new collaboration between different types of disciplines with a specific focus on combining natural and social sciences, and that are inclusive of diverse stakeholders.
- 2) It will thus support research projects, including those with a capacity building component in any of the following thematic strands (or a combination of both):

a. Diverse agricultural production for more sustainable food systems and diets

Despite the current agricultural production systems enabling enough food production increase to cover the needs of a growing population, they have also led to overexploitation of land and other natural resources, excessive chemical and water use, nutrient loading, pollution, erosion of biodiversity, the introduction of alien species and have contributed to driving poor dietary intakes. Today's predominant agricultural production practices are leading to continued genetic erosion and therefore, increased levels of genetic vulnerability of specialized crops and livestock. According to FAO, around three-quarters of the genetic diversity found in agricultural crops has been lost over the last century. About 90% of the world's food energy and protein comes from only 15 plant and 8 animal species, with potentially damaging consequences for nutrition and food security. Rice, wheat, and maize are the three leading food crops in the world; together they directly supply more than 50% of all plant-derived calories consumed by the entire human population.

Furthermore, the shift from diverse cropping systems to simplified, mainly cereal-based systems, despite its contribution to feeding a growing world population, is considered to have contributed to imbalanced diets. Cereals are good sources of energy yet are insufficient to secure the necessary micronutrients and quality protein, thereby causing micronutrient malnutrition. Together with an increase in diets high in animal products, those poor dietary intakes are in part responsible for obesity and diet-related chronic diseases, particularly amongst the poor. Access to unprocessed fruits and vegetables, while limiting the intake of fat, sugar and salt, and avoiding over consumption is generally regarded as key to healthy diets and the prevention of obesity and related chronic diseases.

However, agricultural research and development appears to have been mainly focused on producing standardized varieties for higher yields rather than for improving nutritional quality. A small number of energy-rich but nutrient-poor foods have increasingly displaced a wide diversity of foods. In addition, acceptability to consumers of adding more plant-based foods in their diets is a challenge. At the same time, both in developed and developing countries, a small amount of animal products can improve the nutritional quality of diets.

Nutritionists and increasingly the World Health Organization (WHO) and the Food and Agriculture Organization (FAO) are now promoting the need to diversify agro-ecosystems, in order to ensure that farming systems support more diverse healthier diets. Many

experts are also recommending a shift to more diverse production systems (including crop-livestock integration) in order to meet the increasing demand for food while improving soil health, dynamic equilibrium of the agro-ecosystems, providing economic and social resilience of farming systems and communities, as well as nutritional and health benefits.

It is essential to better understand the dynamics and trajectories of existing systems, including the biophysical, ecological, cultural, social and political processes at play as well as the roles of their various stakeholders. More research is also needed to design and promote more diverse and sustainable production systems that are better adapted to the different agro-ecological, cultural, social and political contexts and their varying levels of integration. An increase in depth and scope of research is needed on how and if more diverse and sustainable production systems can also support social progress in the rural sector by reducing poverty, improving nutrition, improving the resilience of the production system and improving employment and the stability of income and finally, contributing to more sustainable food systems as a whole. It may likewise be important to look at how to ensure that diversity is kept throughout the food chains as well as to study the links (and potential trade-offs) between diversity of production systems (including the use of traditional varieties) and the sustainability of food systems and diets.

b. Sustainable food processing for more sustainable and healthy diets

Agricultural and food products worldwide are increasingly undergoing processing before being prepared and used by the end consumers. The processing serves multiple purposes: from preserving the products, ensuring sanitary quality, or answering increasing consumer demand for ready to use raw or pre-cooked food, to the production of more heavily processed foods. Hence there is a need to better understand the role of sustainable food processing if we are to move towards more sustainable food systems and sustainable and healthy diets.

This thematic strand highlights the need to process food in a sustainable way, food that is attractive to consumers in all aspects and that contributes to more sustainable and healthy diets. This requires an integrated, interdisciplinary, and if possible participatory, approach with stakeholders, to address the multiple research needs.

More research is required on the development of more eco-friendly food processing technologies and their contribution to healthy and sustainable diets, the relative sustainability impacts of processing at different stages in the value chain and the role they can play in making those diets more accessible, economically viable and desirable to the consumers.

It is also essential to better understand the role more sustainable food processing can play in anticipating and addressing new markets and new demands from consumers such as for fresh-like products (ex. through mild processing technologies such as *ohmic* heating, ultrasonic waves, pulsed light- as well as new intelligent preservative packaging systems) and more generally for healthy and sustainable food products (ex. new sources of vegetable protein, etc.). More research is needed on how different types of processing chains interact with various actors, especially women, youth and smallholders, and with consumers' patterns of behaviour and consumption (level of trust and desirability of the products), and how they can improve nutrition and reduce consumption in ways that are beneficial for health, etc.

More research is also needed on how to adapt the technical approaches to the various contexts (socio-economic, general development level of countries, sizes/scale of processing units, etc.).

III. Application process

A. Eligibility

- 3) To be eligible, a proposal must meet the following criteria:
 - a) Involve at least one research partner as part of the consortium submitting the proposal. The proposal should clearly identify the Project Coordinator (which does not need to be a researcher or from a research institution) and the Scientific Leader, if different from the former. A single proponent may submit a proposal provided that it is from a research organization.
 - b) Focus on either of the two (or both) thematic strands of the Call;
 - c) Involve various disciplines combining natural and social sciences;
 - d) Address several dimensions of sustainability (environment, economic, social, cultural, nutritional/health);
 - e) Tackle various aspects of the food systems defined as referring to all processes, actors, institutions and interactions involved in feeding a population; and which include the required inputs and generated outputs, activities and services with both their positive and negative impacts along the different stages of the value chain (i.e., production, processing, distribution, preparation, consumption and disposal of food);
 - f) Make publicly available project results and outputs to ensure that food systems stakeholders have access to it.
- 4) Eligibility is not subjected to any geographical limitation. A particular but not exclusive interest shall be accorded, to the extent possible, to projects which are led or co-led by researchers from Agropolis Fondation's scientific network⁷ and/or Fondazione Cariplo's reference area⁸.
- 5) Research projects must involve partners from concerned countries, especially if they involve developing country case studies.
- 6) For-profit-organizations may be involved as associated partners but are neither eligible to receive funding nor to share intellectual property rights related to any output of the projects funded under this Call. They are, however, encouraged to provide funding towards the implementation of the project.

B. 2-stage process

7) Application for funding under this Call will undergo a "two-stage process."

8) Applicants will first have to submit a Concept Note (CN) for review through a process designed by the co-funding organizations. Proponents of selected CN shall be asked to submit a Full Proposal (FP) which will then be subjected to another round of evaluation. It should be noted that a CN might be asked to be combined with another CN in order to form one single proposal.

⁷ The French scientist should be from Agropolis Fondation's scientific network (See: http://www.agropolis-fondation.fr/uk/about-us/research-unit-leaders.html).

⁸ Fondazione Cariplo's reference area includes the Lombardy region and provinces of Novara and Verbano-Cusio-Ossola (VCO) in the Piedmont region.

IV. Project budget, duration and eligible costs

- 9) For this CfP, an over-all budget of €2M is available for a small number of research projects⁹ jointly performed by researchers and their partners. Funding request for each project should be for a minimum of €200K over three years.
- 10) The grant will only cover expenditures directly related to the project and referring to the following eligible items:
 - a) Personnel costs¹⁰
 - b) Consultancies and services subcontracted specifically for the project
 - c) Consumables and laboratory equipment costs
 - d) Publication and dissemination costs
 - e) Travel expenses
 - f) Patents' costs

Overheads should not exceed 8% of the sum of all the eligible costs.

- 11) Non-eligible items include:
 - a) Expenditures linked to internal services
 - b) More than 12% of salaries of permanent staffs involved in the project
 - c) Expenditures linked to infrastructure
- 12) The project's full cost must be presented including counterparts (additional funding or inkind contribution) from the applicants and their partners in the Financial annex of the Full Proposal.
- 13) In the case of a proposal that is only partially funded through this CfP, the proponents should provide all elements concerning funding for 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. The value added of the requested funding should be clearly stated in the proposal.
- 14) 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). The value added of the requested funding should be clearly stated in the proposal.

VII. Selection process

15) Expert panels and independent experts shall be mobilized to review the eligible submissions received under this Call:

a) Concept Note (CN) stage: A Panel of experts (including representatives from the Scientific Councils of and duly designated experts by the co-funding foundations) supported by the representatives of the co-funding foundations will go through the eligible Concept Notes received and will recommend to the three foundations, for approval by their respective decision-making bodies, a set that will advance to Full Proposal development stage.

⁹ This may include request for Fellowships, capacity-building (e.g., workshops, seminars, training,...), publication and dissemination of research results and other research costs.

¹⁰ This may include the recruitment of scientific personnel to be specifically involved in the project whose contracts duration is within the duration of the project. The proposed project may also cover up to 12% of the total salaries of the permanent staffs involved in the project.

- b) Full Proposal (FP) stage: External reviewers shall be mobilized to review all full proposals. The Panel of experts shall analyze and discuss the proposals as well as the evaluation reports of the external reviewers. They will recommend to the three foundations, for approval by their respective decision-making bodies, proposals for funding.
- 16) Eligible submissions shall be reviewed on the basis of the following criteria:

Criteria	Concept Note	Full Proposal
Scientific quality ¹¹ and overall coherence	Х	X
Relevance and strategic nature of the project	Х	Х
Originality and innovativeness	Х	Х
Tackle various aspects of the food system	Х	Х
Degree of multi-/interdisciplinarity	Х	Х
Partnership quality (i.e., extent of involvement of stakeholders in the	Х	Х
food systems from project conception to implementation; degree of		
collaboration involving scientists and stakeholders)		
International visibility		Х
Structuring effect at the local and international level		Х
Project trajectory and sustainability (i.e., potential to result into a real		Х
scientific breakthrough and/or promote research uptake; potential to		
create positive development impact; planned follow-up post-funding)		
Robustness of the capacity building component (if applicable)		Х
Quality of communication and results dissemination/valorization strategy		Х
(i.e., to ensure that food systems stakeholders have access to results)		
Overall feasibility		Х
Clarity of project plan, coordination and management, including proven		Х
leadership capacity of the Project Coordinator		
Adequacy of project budget and duration		Х
Value addition of the financial support from the three foundations as	Х	Х
compared to other sources of funding		

17) Each project selected for funding shall be subject to the signature of the Grant Agreement with Agropolis Fondation on behalf of the three co-funding foundations and the Consortium Agreement among the partners involved in the project prior to transfer of funds.

VIII. Submitting CN/FP and provisional Calendar

- 18) All submissions must be written in English and must include all the annexes specified below in their specified formats:
 - a) Concept Note Stage:
 - Concept Note
 - Letter of commitment from the institution of the Project Coordinator (see required format)
 - b) Full Proposal Stage
 - Full Proposal
 - Annex 1: Letter of commitment from the institution of the Project Coordinator (see required format)
 - Annex 2: Logical Framework (Word and PDF Format)
 - Annex 3: Gantt Chart (Word and PDF Format)
 - Annex 4: Financial Table (Excel and PDF Format)

¹¹ Including track record in relevant areas, skills and experience of the Scientific Leader and the teams involved.

- Annex 5: Letters of commitment from co-funders, if applicable
- Annex 6: Required CVs (see required format; Word and PDF Format)
- 19) All proposals must be submitted electronically, by the specified deadline, via the platform https://agropolisfondation.optimytool.com/fr/.
- 20) Agropolis Fondation shall not be held responsible for submissions not received due to technical problems preventing the transfer of proposals electronically.
- 21) By submitting a proposal, the proponents assure that they have obtained the due approval of all the participants involved in the project.
- 22) Incomplete submissions, late submissions and submissions exceeding the maximum number of pages allowed (application form and annexes) will be automatically disqualified.

IX. Provisional Calendar

Launch of the Call for Proposals	01 December 2015	
1st stage Deadline for the submission of Concept Notes (CN) Late and incomplete submissions will not be accepted.	29 February 2016	
Announcement of selected CNs	May 2016	
2nd stage Deadline for the submission of Full Proposals (FP) Late and incomplete submissions will not be accepted.	15 September 2016	
Announcement of selected Full Proposals	end-November 2016	
Negotiations, development and signature Grant Agreement and Consortium Agreement	November 2016 - January 2017	
Indicative project start	February 2017	

Any amendments or additions to the Terms of Reference, including the provisional calendar, will be published in the websites of the co-funding foundations. Proponents are invited to consult these webpages regularly.

X. Documents available online

All documents related to the present Call for Proposals are available online at

- http://www.agropolis-fondation.fr
- http://www.fondazionecariplo.it/it/bandi/index.html
- http://www.fondationcarasso.org