

Research Ideas Competition (*updated*)

Pursuing the co-benefits for Health and Environments through food system change *la version française existe pour ce concours*

Overview

Canada's International Development Research Centre (IDRC) is pleased to announce a new Research Ideas Competition to promote health, sustainability and equity in Low- and Middle-Income Countries (LMICs). The IDRC, a Canadian Crown corporation, funds research in developing countries to create lasting change on a large scale and supports local organisations in the Global South to generate the evidence that is relevant in their context. The IDRC is working with the University of Toronto's Dalla Lana School of Public Health and Faculty of Arts and Sciences to manage this competition and ensure scientific integrity, ethical oversight and inclusivity. The goal of this competition is to inspire **novel research ideas** that aim to strengthen policy interventions, population health, environmental sustainability and/or health, gender and social equity in LMICs. These novel ideas are expected to deliver health and environmental co-benefits by addressing the interlinked nutrition and environmental challenges and knowledge gaps that impede shifts towards healthier and sustainable food systems. These ideas will promote a conceptual understanding of healthy and sustainable food systems and account for the practical realities of their implementation.

This competition aims to:

- 1) Identify novel, solutions-oriented research ideas that promote healthy and sustainable food systems in LMICs;
- 2) Support interdisciplinary exchange of ideas that draw upon different theories, methodological tools, frameworks, and approaches;
- 3) Harness lessons from research, civil society and policy spheres which bridge the fields of global health, food systems and environmental sustainability research.

Geopolitical focus: Proposed research ideas must be relevant and applicable to LMIC settings, with a particular focus on low-income communities. This includes, but is not limited to, a theoretical or practical grounding in specific local LMIC context(s), the relevance of an idea to local research, policy or community actors, and how an idea builds on previous engagement with local actors.

Award Details: 10 winning applications will receive \$10,000 CAD *each administered directly to the primary applicant*. The award will be provided upon the submission of the final idea write up and a formal presentation at the Ideas Symposium (virtual or in-person¹). Award-winners will have access to mentorship from a broad interdisciplinary network of mentors including scientific and technical support. Award-winners will also have the opportunity to further strengthen their idea, contribute to a global compendium of research ideas, and attract the attention of a wider audience of researchers, trainees, policy-makers, funders and practitioners.

Eligibility Criteria: *The primary applicant for this call* must be a Doctoral Student or Post-doctoral Fellow that is Canadian, permanent resident of Canada, or citizen of LMICs² enrolled in a doctoral degree or post-doctoral fellowship program at a recognized university.

Application Procedure: To submit applications (in either English or en français) and supporting documents to idrc.researchideas@utoronto.ca

Deadline for Submission: Friday December 11th 2020 (17:00 Eastern Daylight Time).

¹ Subject to COVID-19 related mobility restrictions. A modest travel supplement may be provided to facilitate the participation of the lead researcher if it will be in-person.

² <http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-of-ODA-Recipients-for-reporting-2020-flows.pdf>

Background and Rationale of the Call

Over the past five decades, global food systems and human dietary patterns have changed substantially. Transitions to unhealthy and unsustainable diets are not only increasing the burden of obesity and diet-related non-communicable diseases such as diabetes and certain cancers but are also contributing to environmental degradation and climate change. LMICs are disproportionately affected with more rapidly rising rates of non-communicable diseases in younger populations that further deteriorate health and strain economic resources for all.

Unhealthy diets are the largest contributor to the global burden of disease. Globally, more than 2 billion people are overweight or obese –of which 41 million are children under the age of five years. Obesity alone accounts for 4 million deaths annually and costs the world about 2.8% of Gross Domestic Product. At the same time, about 820 million people remain undernourished, 150 million children are stunted, and more than 2 billion people are micronutrient deficient.

Not only are global diets unhealthy they are also unsustainable. The food systems that produce much of what the world consumes are the single largest cause of global environmental change. For example, agriculture occupies about 40% of global land, and food production is responsible for up to 30% of global greenhouse-gas emissions. The unsustainable nature of global food systems and their impact on climate change creates a vicious cycle. Unsustainable food systems contribute to climate change which over time will affect food production and ultimately human health. The effects of this vicious cycle will be felt most severely across LMICs and specifically in fragile states and climate change hotspots within these countries.

There is an important need to support LMIC researchers, policy-makers and civil society actors to understand how to promote environmentally sustainable and healthy food systems in LMICs. This recognizes that over the past five decades, global food systems and human dietary patterns have changed substantially and have resulted in detrimental impacts to the health of populations and the environments which sustain them. Furthermore, these global dietary patterns are promoting or further exacerbating social and economic inequities, with already vulnerable populations disproportionately facing health and environmental burdens which result from inadequate food systems.

Novel ideas are needed to address the interlinked challenges of nutrition and climate change by promoting shifts towards healthier and sustainable food systems. To date, global actions to this challenge have been slow, uninspiring and insufficient to promote population health and equity, and the environments which sustain them. At the same time, promising transformative interventions and opportunities can be found within low- and middle-income countries where the impacts of climate change are most apparent. The scale and ambition of the challenge requires LMICs to fully participate in and shape this discourse. Ultimately, a global transition to a healthy, equitable and sustainable food system must involve local representation, Southern leadership and research-driven solutions, which are meaningful, feasible and sustainable in LMIC contexts.

Scope and thematic directions of the call

This Research Ideas competition aims to identify novel, solution-oriented ideas in research to promote healthy, climate-resilient and sustainable food systems in the Global South through interdisciplinary exchange of ideas that draw upon different theories, methodological tools, frameworks, and approaches. Lessons from research, civil society and policy spheres will be harnessed to bridge the fields of global health, food systems and environmental sustainability research.

Applications are encouraged to propose ideas relevant to the following thematic directions:

1) Developing a practical understanding of food systems models and frameworks

The relationship between health, environmental sustainability and food is highly complex and influenced by multiple, non-linear, adaptive drivers and dynamics. Several different conceptual frameworks and models have been proposed to capture and model these relationships and interactions that shape food systems. These models include, for example, the 2017 report by the High Level Panel of Experts on Food Security and Nutrition, the Global Syndemic Model (Swinburn et al 2019), and the Sustainable Food Systems Model (Downs et al. 2020). Common to all of these models and other frameworks is a recognition that sustainable food systems include not only food production value chains (which include production, storage, processing, distribution and retail systems), but also consumer-side factors, political and socio-cultural determinants of health and equity, environmental factors and many other critical drivers. There are also growing efforts to integrate these food systems models and frameworks with understandings of global environmental dynamics and change processes. While these models advance a more comprehensive and intersectoral understanding of food systems, there is an important need to develop their practical utility.

Possible gaps or challenges to address may include, but are not limited to research to:

- Guide practical decision-making or advise local policy-making to promote healthy and sustainable diets;
- Identify levers and priorities within these food systems for research, policy interventions and community action and how key actors in transformative change may leverage parts of these systems to effectively improve health and equity, and environmental sustainability;
- Understand how economic, legal and political spheres may act as facilitators, barriers or constraints to positive transformations to food systems;
- Promote healthy and sustainable food systems through systems-level actions, policies, and structural changes that can spur sustainable and large-scale behaviour change.

2) Strengthening the coherence of food systems interventions

Research is needed on what the integration of environmental sustainability and intersectoral co-benefits might mean in the context of healthy and sustainable diets. Much of the environmental sustainability discourse has revolved around the impacts of climate change and adaptation options to mitigate against these impacts. In addition, greater emphasis on the environmental goals in food systems research and policy-making is required.

Possible gaps or challenges to address may include, but are not limited to research to:

- Prioritize the integration of sustainable solutions (e.g. low/zero carbon emissions, less water intensive food production, reduction in agrochemical usage, healthy soils, biological diversity, air quality, etc.) within food systems interventions and their metrics (i.e. key indicators or indices) that can and should be measured towards these goals;
- Strengthen food systems and related policies aimed at making them more prepared, equitable and resilient for future threats to global health and environmental sustainability;
- Identify novel ideas and policies that not only focus on the health and sustainability of food systems, but also downstream benefits and returns towards economic growth and prosperity (or vice versa);
- Identify measurement and assessment tools that can help policy-makers better understand the multi-sectoral impacts and trade-offs of different policy pathways towards improving food systems.

3) Enhancing vulnerability and equity dimensions of food systems

There is a growing scholarship on the gendered and other intersectional dimensions of food systems, including its differential impacts on various population groups. Building and promoting healthy and sustainable food

systems requires designing and implementing intersectoral actions, structure and policies that go beyond the health and environment domains, to also encompass social, economic, and equity dimensions. The anticipated and unanticipated consequences of food systems interventions require further study.

Possible gaps or challenges to address may include, but are not limited to research to:

- Understand how pro-equity economic and social policy interventions can deliver positive knock-on effects towards food systems to improve health and environmental sustainability;
- Understand who bears the health and environmental burden of food systems in LMICs;
- Identify whose rights are upheld and whose priorities are represented in food systems, both in their current structures and in the future trajectories of shifting food systems;
- Ensure food is produced, distributed and consumed in a sustainable and equitable manner that protects the right to food for all;
- Understand how different structures, policies, and models of food systems might reduce, or contribute to, gender inequality.

Key considerations: Building back better from COVID-19

As one of the most serious pandemics of the century, the current COVID-19 pandemic is creating new and dramatic challenges for food and nutrition security and is expected to incur long-lasting and significant impacts on the health of populations worldwide. The pandemic is also exposing deep and entrenched fractures in social, economic, health and food systems worldwide, putting into sharp focus, untenable structures, policies, and practices which drive poor global health and environmental degradation, and which exacerbate long-standing and historical inequities amongst marginalized populations. Building on growing support for major changes to these systems, global health and environmental advocates have advanced the concept of ‘building better’ – envisioning and promoting the deep structural changes which are needed to advance a vision of a healthier and more equitable world.

While not a specific thematic direction under this Call, research ideas should be **grounded in the current global realities resulting from the COVID-19 pandemic** and should use the global discourse on ‘building better’ as a starting point for looking ahead and promoting innovative and impactful change.

Application Requirements

Eligible applicants to this competition are required to submit a **proposal (maximum 5 pages)** of a research idea which directly addresses at least one of the three aforementioned thematic directions, and is informed by the key consideration of ‘building better from COVID-19’. In addition, *the applicant can provide the details of up to two co-collaborators (optional) and their affiliations* when completing an [application form](#) (a copy can be downloaded). Please note that all applicants will retain **all intellectual ownership of their idea** and will be able to further develop it as they would like. Applicants are not obligated to publish their proposal in the compendium of ideas.

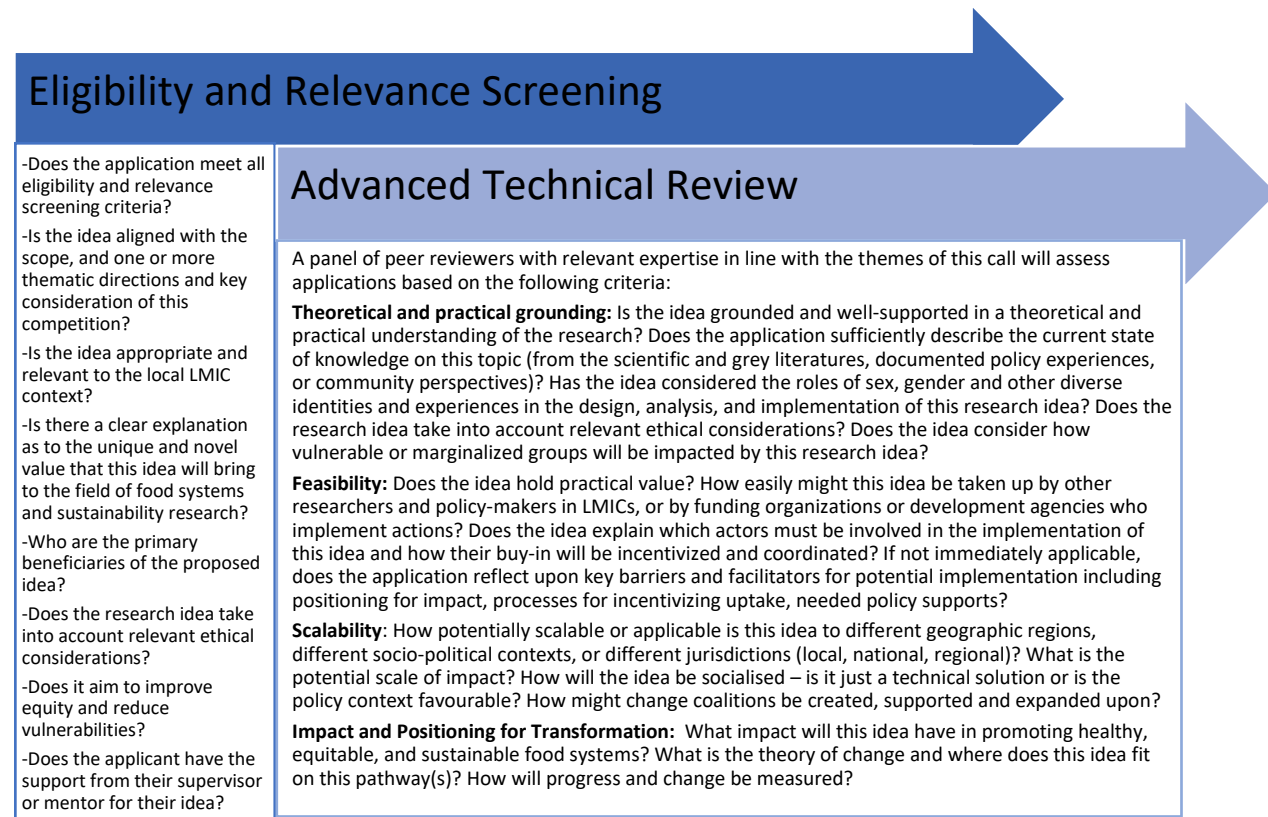
The proposed research idea should be a research topic which explains:

- a brief overview of the state of knowledge on this research topic;
- a rationale which explains why and how research on this topic responds to the needs and priorities of the Global South, and how further research could help priority setting with donors;
- a description of the theory, framework and/or methodological approach which could be used to describe and investigate this priority;
- clarity and appropriateness in addressing the ethical considerations of the proposed research;
- the expected impact of research into this area as well as metrics or approaches that could be used to measure this impact.

In addition to this proposal, *the CV of the primary applicant and one letter of support from a supervisor or a mentor that can speak to the potential for the idea and the research environment where the doctoral or post-doctoral fellow is based, should be included. Additional figures, frameworks, or scientific references can also be added in the supporting annexes (up to a maximum of three appendices and not included in the proposal page limit).*

Selection Process

Applications received in this competition will undergo a two-stage review process:



Key Dates

Deadline for submission of research idea:	December 11 th 2020
Successful applicants will be invited to further their ideas through mentorship:	February 2021
Ideas Symposium (virtual or in-person):	Spring 2021

Contact for Further Information

Any inquiries related to the Call and application process should be sent by e-mail to idrc.researchideas@utoronto.ca