Climate-Smart Agriculture and Food Systems Initiative Funding Opportunity

Interdisciplinary Challenge Team FAQ

On July 20, 2022, Genome Canada held an information session about the recently announced **Climate-Smart Agriculture and Food Systems** Interdisciplinary Challenge Team (ICT) Funding Opportunity (FO). It was intended for ICT registrants to learn more about the portfolio framework. This FAQ was developed based on discussions in six breakout sessions on that day.

Question	Answer
How many ICT projects will be funded?	Refer to the ICT FO. It is anticipated that 8-10 ICTs will be funded as part of the Climate-Smart Agriculture and Food Systems Initiative portfolio.
What is the maximum budget for an ICT project?	Refer to the ICT FO. There is no maximum budget for ICT projects, but Genome Canada's maximum contribution to an approved project will be $3 million.
When does the co-funding need to be confirmed?	There needs to be a reasonable plan for co-funding at the time of the full application. This will be assessed and be part of the evaluation of the full application. At the time of the release of funds, 75 per cent of the co-funding needs to be committed.
Must a single project address the entire food production system, or just fit into one of the parts?	It is not expected that an individual ICT address an entire system. Rather, it should address the areas that are relevant to the project goals. Applicants are encouraged to demonstrate consideration of how their project goals can impact the system as a whole, but their projects are not required to touch on every part.
Will the review panel include international reviewers?	The review panel will include both international and Canadian members. It will not include academics from Canadian universities due to potential conflicts of interest.

Question	Answer
What are the governance structures within the challenge?	The governance roles and responsibilities will be set by the Genome Enterprise in fall 2022 and will be tuned to the specific portfolio of projects selected for funding. General design considerations include: • There will be an external portfolio oversight committee responsible for overall direction and accountability. • There will be a mechanism for the ICT Project Leaders to be engaged in the operational coordination of the teams. • The oversight of individual ICTs will involve the Centres and external advisors and be managed at a portfolio level.
At the Letter of Intent (LOI) stage, should we identify other projects that synergize with other applications to enhance the portfolio?	Applicants are encouraged to identify potential synergies with general research areas or with specific projects (e.g., how your project team could interact with other projects in the portfolio and the broader ecosystem to increase its overall impact). However, applicants are cautioned against creating dependencies between projects as there is no guarantee that both will be selected for inclusion in the portfolio. Applicants could bolster their proposal by combining with another LOI-stage applicant into a single project, provided the combined proposal adheres to the funding opportunity guidelines.
Will funded ICTs be merging together in the portfolio?	No, ICTs will be independent projects within a portfolio. However, ICT activities, processes or designs may be altered to ensure better connectivity between projects and the two Hubs in the portfolio: • the Knowledge Mobilization and Implementation Coordination Hub (hereafter "the KMIC Hub"); and • the Data Coordination and Collaboration Hub (hereafter "the Data Hub")

Question	Answer
How will ICT compliance with portfolio-level activities be enforced?	Funding agreements will have strict language about pausing or removing funding if teams are not compliant with participation in portfolio activities and delivering on the portfolio data and knowledge management plans—e.g., data and resource sharing. ICTs will report on progress in a transparent portfolio dashboard to enable teams to hold each other accountable.
What weight is being given to portfolio connections?	Portfolio considerations will drive the second phase of review at the full application stage, after the first phase focuses on the evaluation criteria for individual projects established for the competition—that is, quality of the research proposal, impact and benefits for Canada, and management and financial competency. The projects considered the most meritorious will be considered for inclusion in the portfolio. The portfolio selection committee—with broad expertise in research, portfolio design and management, challenge-oriented innovation policy, and climate change policies—will select the final portfolio of ICT projects. The committee will base its selection on the potential for synergy across a diversity of topic areas, technologies and teams; the potential for building on regional priorities for national impact; and the potential for effective coordination. See the ICT FO for more details on review considerations.
At what scale should systems-level thinking be considered? For example, could systems-level thinking be at the genomics-transcriptomics-proteomics-metabolomics level, or a whole organism level, or the crop-feed-livestock-environment level?	Each of these examples could be considered systems-level thinking. Researchers could demonstrate how the ICT integrates with the system(s) being considered and/or that the researchers understand that their research and deliverables will have an impact outside of their immediate work. It may be difficult for a single ICT to demonstrate its impact on the entire agriculture and food production system, so teams should at least demonstrate consideration of how their research could have impact cascading out from their research.

Question	Answer
Where in the LOI should the ICT discuss the impact of their research on different systems?	This could occur in the LOI in: • Section I, Research Proposal (including integrated GE^{3}LS); • Section IV, Potential Impact and Benefits for Canada; and • Section V, Portfolio Considerations. In the Research Proposal, teams could also discuss how the ICT's interaction with the KMIC Hub could have impact on different systems.
Should we include metrics as part of the LOI?	It is important to consider the differences of individual and collective impacts from the projects and the portfolio, respectively. **The key metrics to demonstrate impact will be assessed at the portfolio level.** These metrics will be selected and measured by the teams during the initial and subsequent portfolio convening and coordinating meetings. **For the LOI submission, applicants should demonstrate consideration of potential higher portfolio-level impacts** of their proposal in the 'Potential Impact and Benefit to Canada' section. Specific metrics are encouraged but not required at the LOI stage. For context: Once selected into the portfolio, Principal Investigators will link metrics proactively and constructively to their project impact narrative. It is important to articulate the project goals with respect to stakeholders and potential users. **The challenge places importance beyond the development of innovative technologies and more towards the adoption and implementation by end users.**
Is the portfolio broader than the project list and does it include broader society?	Potentially, yes. As a non-limiting example: A project might have several end users integrated within its core team, but there may be regulatory approval required (as an example) to fully realize the benefits. Therefore, there may be value in engaging broader stakeholders with relevant regulatory expertise. These stakeholders might not be part of the initial project concept but might be needed as the project advances.

Question	Answer
When should projects reach out to stakeholders? During the LOI stage?	Applicants should have key stakeholders, including end users, on board at the LOI stage. All projects must clearly demonstrate engagement with users (as well as with stakeholders and rights holders) in the development and execution of the research plan to help ensure the uptake and practical applicability of the research.
How are timelines between ICTs and Hubs going to be coordinated?	Hub timelines are offset three months later than the ICTs, i.e., launched September 2022, decision June 2023. Timelines will be synchronized through starting dates and accelerated finalization of funding conditions post-award.
What are the roles of ICTs and Hubs in the challenge portfolio, given that data and knowledge mobilization activities will overlap?	ICTs will be accountable for data and knowledge mobilization activities within the projects, and for coordinating these activities with the KMIC and Data Hubs and other ICTs in the portfolio. Hubs will be accountable for such activities across and beyond the portfolio, and are intended to bridge the multiple species, sectors and technologies that make up the portfolio. The Hubs will provide shared expertise and resources to the ICTs to address gaps, connect projects, and create bridges to external stakeholders critical to adoption and implementation.
Can those applying to ICT apply to a Hub?	Project Leaders from the ICTs cannot be part of a Hub, though other members of an ICT could be involved part of a Hub.
How will the uncertainty of the projects included in the final portfolio be handled in the selection of the Hubs?	Potential Hub applicants will be aware of the ICT registrations before they register. They will also have access to the shortlist of ICT LOIs advancing to full application before they submit their full application for the Hub FO.

Question	Answer
Is there guidance for applicants in designing data governance?	ICTs must submit plans that explain how they will manage, preserve and share the scientific data and resources generated by the project. These plans must comply with Genome Canada's **Data Release and Sharing Policies** and commit to working with the Data Hub. Data plans are expected to reflect internationally accepted standards and include a description of elements, such as: • the type and quantity of data that are being generated through the project; • the metadata and controlled languages that will be used or advanced; • the timing of data-generating and -sharing; • data governance and stewardship requirements; and • barriers or limitations to data-sharing and how they will be addressed. Controlled access should be part of every data governance structure.
For some genomic data that is from producers, they own the data and need to get specific approbation from each producer. How will this be managed?	If this situation is a concern for an ICT proposal, then applicants are encouraged to work with their receptors and stakeholders to address the concern, at least in a preliminary fashion. Existential barriers to portfolio-level data sharing and activity coordination will be considered as negatives during portfolio selection. Such issues as ownership, access, sharing, limits of use, etc., for the portfolio of selected projects will be addressed, prioritized and addressed in the activities of the Data Hub.