Evaluation of the Canadian International Food Security Research Fund (CIFSRF)

EVALUATION REPORT | SEPTEMBER 2016

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Executive Summary

Launched in 2009, CIFSRF is a 9-year, 2-Phase initiative funded by Global Affairs Canada (GAC) and the International Development Research Centre (IDRC), and implemented by IDRC. It aims to increase environmentally sustainable food security (FS) for poor people, especially small-scale farmers and women, through applied, collaborative, results-oriented research that informs development practice.

The Fund represents a partnership of IDRC and GAC, "to encourage practical, applied research between Canadian and developing country organizations" intent on "promoting the scaling up of innovations and research results." It has supported applied research initiatives involving Canadian research institutions — mainly universities — and developing country (DC) partner organizations, as well as others including not-for-profit and private sector actors. \$124.5 million has been invested over the course of CIFSRF's 2 phases. Based on 6 Calls for Proposals, 39 projects have been undertaken in 24 countries by 20 Canadian organizations and 40 DC partner organizations.

As per Government of Canada requirements, the current evaluation of CIFSRF was commissioned with the following three objectives:

- 1) Determining the effectiveness, efficiency, relevance and sustainability of CIFSRF Phase 1;
- 2) Determining the effectiveness, efficiency, relevance and sustainability of CIFSRF Phase 2 (to date); and
- 3) Providing strategic findings, conclusions, recommendations and lessons for the future of the CIFSRF program.

The evaluation's primary intended users are CIFSRF's Governance Committee (GC), management and staff. The evaluation has been composed to provide them with guidance for determining and communicating program results to various stakeholders, and to inform current and future FS policy and programming. The main clients of the CIFSRF combined evaluation are

the targeted DCs who should be able to determine the relevance, usefulness and contributions of CIFSRF program results to their own national policies and food and nutrition strategies.

Phase 1: Summative Evaluation

CIFSRF Phase 1 was implemented from October 2009-March 2015, with the purpose of "increasing the contribution of Canadian organizations towards solving global problems of food insecurity through applied, collaborative results-oriented research in partnership with developing country partners." Funding for Phase 1 was CA\$62.5 million (\$50 million and \$12.5 million were provided by GAC and IDRC, respectively). During Phase 1, 19 projects (and 2 extensions) selected in 3 Calls for Proposals and involving 12 Canadian and 25 DC organizations were implemented in 20 countries.

Effectiveness

Overall, CIFSRF has been **highly effective** in meeting its objectives and targets, as defined by the Fund. CIFSRF achieved 12 of the 13 planned targets for immediate outcomes and made significant progress toward the targets for intermediate outcomes. This augurs well for achievement of CIFSRF's ultimate outcome: increased environmentally sustainable FS for poor people, with a focus on women and women farmers, in targeted DCs.

The Fund achieved these targets through partnerships involving research organizations in Canada and DCs. CIFSRF played a key role in establishing and strengthening Canadian-DC partnerships. The Fund effectively mobilized Canadian expertise, and Canadians are widely recognised as having contributed significantly to the success of projects. Canadian researchers and institutions also benefited from their engagement in the partnerships.

Very substantial progress was made in **generating new knowledge** on environmentally sustainable and gender sensitive FS applications. CIFSRF supported an impressive volume of knowledge production, reflected in the large numbers of studies completed, technologies developed or tested, and reports and publications produced.

Somewhat less progress was made in improving the extension-related abilities of organizations to implement and support new FS solutions. The Fund important contributions made individuals' ability to transfer technologies to intended users/beneficiaries, but it is unclear if it contributed to organizational capacities in this area. Despite achieving or surpassing most of its planned targets in this regard, relatively little progress was made in improving awareness and understanding of potential application-ready solutions to FS issues, most notably among the Canadian public.

The evaluation unearthed several **positive unintended or unexpected results** and a few negative ones (see Annex IV for a detailed list).

Relevance

CIFSRF Phase 1 results were broadly relevant to the FS needs of the poor in DCs, illustrating complementary food security enhancing pathways. However, processes for identification, initiation and selection of projects comprised little to no representation of certain key beneficiaries, namely the poor, small-scale and women. farmers. Overall. shortcomings were in evidence in the structures and mechanisms through which program relevance for poor, small-scale farmers and women was to be ensured.

Program goals were **consistent with Canadian international development** policies and programs. GAC representatives participated actively in governance, project selection, and strategic decision-making processes. Lessons learned from CIFSRF *overall* fed into internal GAC discussions regarding policies/programs, suggesting there may be future opportunities for

CIFSRF research results to inform GAC policies/programs.

Private sector engagement was an area of significant learning for CIFSRF. Phase 1 projects proved highly relevant to small-scale private sector actors, and less so to DC national private sector actors and multinational companies. The program showed significant potential for increased engagement with national level private sector actors.

Views on the extent of the Fund's **contributions to thinking and debates** on FS and agricultural innovation vary considerably. Many of those close to the Fund believed it contributed significantly to thinking and debates on FS and agricultural innovation, while others not directly involved with CIFSRF perceived fewer contributions.

Sustainability

The provision of Phase 2 scaling up funding and support encourages but does not ensure the continuation, expansion and sustainability of benefits and results beyond Phase 1. It did however enable Canadian-DC partnerships to persist, a much-valued benefit of the program. Without Phase 2 support, some valuable results and benefits of projects that received only Phase 1 funding were likely but not certain to persist. CIFSRF partners were effective in securing additional human and some financial resources for their projects during Phase 1, only partially achieving targets for complementary funding.

Cross-Cutting Issues

CIFSRF strongly integrated two of GAC's crosscutting themes: gender equality and environmental sustainability.

IDRC and GAC's commitment to integrating gender equality into CIFSRF programming was commendable. Adopted early on, CIFSRF's gender strategy was catalytic in building awareness around gender equality among project teams, though some concerns remained at the end of Phase 1. Most projects contributed to increasing access to resources and nutritional benefits for women and their families while

some contributed to increased decision-making among women.

CIFSRF's environmental strategy was designed to ensure that funded projects were consistent with Canadian policy on environmental sustainability. CIFSRF projects were reported to have had no significant negative environmental impacts over the course of Phase 1, delivering some valuable environmental benefits and services in DCs

Efficiency

IDRC's program management and governance have been **both effective and efficient**.

Phase 1 of CIFSRF was delivered within its overall timeframe and budget. However, implementation of the Call for Proposals process and program monitoring were under-resourced. Staff responded by reallocating resources to the Call for Proposals process and adapting internal processes. Most key strengths of the CIFSRF program relate to its **people and processes**. CIFSRF's governance arrangements were suitable and generally worked well. However, they lacked an appropriate diversity of participants and expertise, given the mandate of the Fund.

Phase 2: Formative Evaluation

In 2013, a second phase of CIFSRF was launched, with a 5-year duration period and a total budget of CAD \$62.5 million. Phase 2 was designed to build on the FS research results and innovations of Phase 1, support more FS research in priority areas and scale up the most promising research results from Phases 1 and 2, to benefit subsistence farmers (particularly women) and contribute to global FS. An important new aim of Phase 2 has been to scale up innovations and develop models for scaling up that can be used by others in the future. Via 3 Calls for Proposals, 18 partnership projects in 17 countries received CIFSRF support during Phase 2.

Effectiveness

CIFSRF has been effective in favouring the continued and increased use of FS-related

Canadian expertise and knowledge, notably through support of Canadian-DC partnerships. During Phase 2, 17 Canadian and 26 DC institutions received CIFSRF funding, a notable increase from Phase 1. Most stakeholders recognize the valuable methodological and technical contributions of Canadians.

CIFSRF partners widely report a strengthening of their organizational capabilities to variably undertake research and test solutions, pursue project management, and take important steps towards taking their research to scale. They report lesser enhancement of their abilities to strategically communicate and share their work with wider audiences or participate in policy processes. The Fund is also concerned with strengthening the ability of DC organizations to implement and support new FS solutions. The Fund seems to be on track to achieve its outcome targets in this area, but it is not clear if this will lead to strengthened capacities of participating organizations to carry out future extension-related activities.

CIFSRF's Phase 2 emphasis on scaling up is an appropriate continuation of the research-based approach of Phase 1. It strikes a good **balance between consolidating and scaling up** the best of Phase 1 innovations and identifying new high-potential innovations for scaling up.

While Phase 1 focused on developing new technologies for improving FS, Phase 2 added the important challenge of **developing and testing models for scaling up** the use of research results that benefit large numbers of the food insecure in DCs. Given the current high priority placed on scaling up in the international development community, results of CIFSRF-supported research on scaling up may be of broad interest and utility in the future. However, the Fund does not appear to have strategies for sharing knowledge across the different project teams, for drawing general conclusions and formulating lessons, and for making these conclusions and lessons widely available.

CIFSRF's Phase 2 communication strategy is integrating lessons learned from Phase 1. Indicators and targets were augmented and

slightly modified. Greater emphasis was also placed on communicating impact, creating complementarities between project and program-level communication, and offering communication support to projects. Still, CIFSRF's effectiveness in improving awareness and understanding remains to be seen.

CIFSRF Phase 2 is on track to meet its targets with regards to the use of research results to contribute to more informed public policies and programming related to FS and nutrition in DCs. The evaluation team has found that all sampled projects are either currently (50%) or on their way to (50%) informing or influencing policies or programs related to FS and nutrition in DCs. This is a notable achievement for a research fund, illustrating that the approaches used to engage policy makers in DCs have yielded very positive results.

The Fund's ultimate outcome is **a laudable aspiration** — "Increased environmentally sustainable food security for the most food insecure: including women, girls, women subsistence farmers, men, and boys in targeted developing countries and regions." However, improving the FS of the *most* food insecure may be an overly ambitious objective.

Relevance

CIFSRF Phase 2 expected results are broadly relevant to the FS needs of the poor in DCs, focusing on key food security themes (availability, accessibility and use) and illustrating a variety of scaling up approaches. However, processes for the identification, initiation and selection of projects comprise little to no participation of key beneficiaries, namely the poor, small-scale farmers, and women. As scale up takes places, prioritizing FS requires renewed emphasis.

With stronger emphasis on **private sector engagement** in Phase 2, the Fund has increased the role of small-scale, and to a lesser extent, national level private sector actors. Despite an increased engagement with multinationals, relevance of this sector as key CIFSRF actors in building FS for the poor remains in question

Sustainability

CIFSRF's **portfolio approach** to selecting and scaling up projects with potential is tactical. Important dimensions of doing so are not being pursued systematically. The program is varyingly over-relying on Project PIs and IDRC staff for strategizing, implementing, training and researching scaling up, which is problematic given inadequate experience, capacity and time.

With CIFSRF's portfolio approach, a diversity of scaling up pathways is being supported and simultaneously researched. It is early to ascertain the most promising scale-up strategies, though progress is being made for a high proportion of projects in developing the multiple characteristics required for effective scaling up. An important tension remains between scaling up research and researching scaling up that requires attention for both priorities to be undertaken optimally.

Program goals are consistent with Canadian international development policies programs. In Phase 2, there is one example of a result having been integrated into GAC programming, and another with potential for synergies. Lessons learned future CIFSRF overall are feeding into internal GAC processes. Untapped opportunity exists for GAC and the broader development assistance community to strategically support CIFSRF results that have demonstrated policy influence in DCs.

Cross-Cutting Themes

Drawing on lessons from Phase 1, **newly institutionalized processes for gender equality** are not only benefiting CIFSRF but also IDRC's AFS program as a whole. As in Phase 1, projects are contributing to more economic opportunities for women and, more modestly, to increased participation in decision-making.

Environmental sustainability considerations have been steadily less prioritised in formal terms over the course of Phase 2. In practice, the program has nonetheless largely supported environmentally sustainable projects, and

provided advice to grantees to ensure that environmental sustainability priorities are well understood and adequately pursued.

Good governance is an important Phase 2 addition to the Fund as a cross-cutting theme. Evidence available to date on **the promotion of good governance principles** is limited but encouraging, though consistency appears to be lacking on how project teams understand what it means and might entail for their work. In practice, CIFSRF projects are largely pursued collaboratively by partners. There is less evidence of 'bottom up approaches' to Research for Development (R4D) or widespread community-level empowerment at this stage.

Efficiency

IDRC's program management and governance have generally been efficient. Phase 2 of the CIFSRF Program is delivering outputs within its budget and on time. However, implementation of the Call for Proposals process and program monitoring are under resourced. Staff are responding by reallocating resources to the Calls for Proposal process and continuing to adapt internal processes developed in Phase 1.

CIFSRF's governance arrangements have been appropriate to the Fund's overall objectives and have contributed to its effectiveness. The GC and SAC have taken effective measures to address the weaknesses of Phase 1, but what remains to improve the Fund's governance is a yet more diverse and representative GC.

Future Programming

There is a clear continued need for CIFSRF. It is highly aligned with Canadian international aid and development priorities. The Fund has been a unique source of motivation and support for Canadian universities to rebuild their international agricultural programs and establish partnerships with DC organizations. It has

brought renewed credibility and visibility to Canada as an actor in international agricultural R4D. Project support has strengthened and expanded DC research teams actively involved in promising FS research and scale up activities. Maintaining the Fund can be expected to continue building on Canada's reputation in important ways.

Given the Fund's strengths success so far, there is much that the Fund should maintain and build upon and little that should be eliminated. Thus, the evaluation team recommends that:

- Longer-term funding is provided to CIFSRF and to projects comprising the portfolio;
- Partnerships are strategically diversified;
- Diverse scaling up pathways are supported;
- GAC's strategic engagement is expanded;
- In the context of climate change, resilience-building agroecological considerations and approaches feature more centrally in the program and in project selection;
- Technology assessments become features in project selection;
- Administrative procedures are simplified;
- Governance/management systems are strengthened; and
- Opportunities are expanded for learning, knowledge-sharing and networking.

This evaluation's recommendations for future programming are intended to help the Fund advance its objectives by retaining and building upon the elements underpinning its success, while adapting and innovating institutionally, programmatically and strategically.

Acronyms

ACIAR	Australian Centre for International Agricultural Research
AFS	Agriculture and Food Security
CCIC	Canadian Council for International Co-operation
CFSS	Canada's Food Security Strategy
CGIAR	Consultative Group on International Agricultural Research
CIDA	Canadian International Development Agency
CIFSRF	Canadian International Food Security Research Fund
CESO- SACO	Canadian Executive Service Organization/ Service d'assistance canadienne aux organismes
CultiAF	Cultivate Africa's Future (Australian International Food Security Centre / IDRC)
DAC-OECD	Development Assistance Committee – Organization for Economic Co-operation and Development
DC	Developing Country
DFAIT	Department of Foreign Affairs and International Trade
DFATD	Department of Foreign Affairs, Trade and Development
FGD	Focus Group Discussion
FS	Food Security
FSS	Food Security Strategy
GAC	Global Affairs Canada
GC	Governance Committee
НКІ	Helen Keller International
HQ	Headquarters
IDRC	International Development Research Centre
IPR	Intellectual Property Rights

M&E	Monitoring and Evaluation
MTE	Mid Term Evaluation
NGO	Non Governmental Organization
ODA	Official Development Assistance
OECD-DAC	Organization for Economic Cooperation and Development - Development Assistance Committee
PDI	Partnerships for Development Innovation Branch of Global Affairs Canada
PI	Principal Investigator
PMF	Performance Measurement Framework
РО	Program Officer
R4D	Research for Development
RQ	Research Quality
SAC	Scientific Advisory Committee
SEA	Strategic Environmental Assessment
TOR	Terms of Reference
UMG	Universalia Management Group
UN	United Nations

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1 Introduction

The Universalia Management Group Limited (hereafter referred to as "Universalia" or "UMG") is pleased to present this draft evaluation report of the Canadian International Food Security Research Fund (CIFSRF) to the International Development Research Centre (IDRC) and Global Affairs Canada (GAC).

Launched in 2009, CIFSRF is a 9-year, 2-phase, \$124.5 million initiative funded by GAC and IDRC. It aims to increase environmentally sustainable food security (FS) for poor people, especially women, through applied, collaborative, results-oriented research for development (R4D). The Fund represents an IDRC/GAC partnership, "to encourage practical, applied research between Canadian and developing country organizations" intent on "promoting the scaling up of innovations and research results." 2

The Fund has supported applied research initiatives involving Canadian institutions and developing country (DC) partner organizations, as well as others including not-for-profit and private sector actors. Over the course of its two phases, CIFSRF's six Calls for Proposals have translated into 39 projects being undertaken in 24 countries. A total of 20 Canadian organizations and 40 DC partner organizations were funded by the Fund.

The evaluation's primary intended users have been defined as CIFSRF's Governance Committee (GC), management and staff. Thus, the evaluation has been composed to provide them with guidance for determining and communicating program results to various stakeholders, and to inform current and future FS policy and programming. The report should also inform DC stakeholders connected with CIFSRF programming and themes of the relevance, usefulness and contributions of CIFSRF program results to their own national policies and food and nutrition strategies.

1.1 Objectives of the Assignment

As per Government of Canada requirements and in response to the assignment Terms of Reference (TOR), the evaluation has three components:

- A summative evaluation of Phase 1: This component assesses Phase 1's contribution to the Fund's immediate outcomes, laying the groundwork for intermediate outcomes expected through Phase 2. The main goal is to provide learning and accountability to CIFSRF's GC and key users.
- A **formative evaluation of Phase 2:** Aimed at informing ongoing implementation, this formative evaluation is intended to assess the extent to which Phase 2 is on track to meeting the expected immediate and intermediate outcomes, within a trajectory towards ultimate outcomes.
- An integrated analysis of Phases 1 and 2: This component of the assignment is intended to bring together conclusions from the above two phases and provide strategic recommendations to inform future FS policy and programming.

The evaluation TOR (see Annex XLIII) include a set of overarching questions drawn from the Development Assistance Committee – Organization for Economic Co-operation and Development (DAC-OECD) evaluation guidelines, which relate to the Fund's effectiveness, efficiency, relevance and sustainability, and to key cross-cutting issues (gender equality, environmental sustainability and governance (in Phase 2).

1.2 Methodology

The CIFSRF evaluation process, from inception to report submission, was undertaken from March to June 2016. Universalia's evaluative and methodological approach for addressing its primary objectives was utilisation-focused and participatory (see Annex XL for full methodology). Pursuing a mixed methods approach, data was gathered and triangulated from the following sources:

- 252 stakeholders consulted through interviews and focus group discussions (FGDs);
- Document and secondary data review;
- 5 in-country field visits to Bolivia, Cambodia, India, Kenya and St. Kitts and Nevis, and a virtual field visit to Ethiopia;
- An online survey of all Canadian and DC Principal Investigators (PIs), with a response rate of 55%.

Utilisation-Focused, Participatory and Mixed-Methods Approach: Guided by OECD-DAC's Evaluation Quality Standards and Guidelines, as well as IDRC's Evaluation Principles, the design and conduct of the evaluation was pursued so as to respond to the primary users' needs and objectives, intent on favouring the uptake of relevant, useful and feasible recommendations. Given the multi-partner nature of the Fund, Universalia worked closely with IDRC and GAC, as well as a broad spectrum of stakeholders, to elicit their perspectives and promote a sense of ownership and trust in the evaluation.

Limitations: The time available for the overall evaluation was very limited given the scope of work required. While this had relatively few implications for the assignment, the evaluation team had planned to undertake 6 field visits, but in the end 5 were carried out in the field and one (Ethiopia) was carried our virtually.

Given the time constraints, field visits were largely undertaken very early in the process, prior to much document review or high-level stakeholder interviewing (e.g. with IDRC and GAC). This posed a limitation on the evaluation team's ability to cross-check high-level perspectives with those of DC stakeholders and community-level beneficiaries. Finally, the evaluation was constrained by the lack of independent evaluations of CIFSRF supported projects. Despite these limitations, the evaluation team is confident that the overall report is rooted in appropriate, sufficient and robust data.

2 Phase 1: Summative Evaluation

2.1 Introduction

The Canadian International Food Security Research Fund (CIFSRF or "the Fund"), was launched in 2009 as a 5-year program jointly funded by Global Affairs Canada (GAC) and the International Development Research Centre (IDRC). IDRC was responsible for implementing the Fund, which had a Governance Committee (GC) jointly chaired by GAC and IDRC. CIFSRF's purpose was, "to increase the contribution of Canadian organizations towards solving global problems of food insecurity through applied, collaborative results-oriented research in partnership with developing country partners." Its objectives were to⁴:

- a) Increase food security in developing countries through investments in applied research for agricultural development and nutrition;
- b) Harness Canadian expertise and knowledge in food security related science and technology to develop solutions with and for the developing world;
- c) Use the results of research generated through the CIFS Research Fund to inform CIDA and developing country food security policies and programmes, so as to ensure the proper extensions and adoption of these results in developing countries and a sustained aid effectiveness approach to this key Agency thematic priority.

CIFSRF was established as a response to the global food price crisis of 2007-2008, at a time when GAC and other development organizations were re-engaging in international agricultural research. Its design reflects a concern for widespread gender inequities and issues of environmental sustainability in developing countries (DCs).⁵ Canadian and DC knowledge and expertise were mobilized through research partnerships involving Canadian and DC organizations conducting large Research for Development (R4D) projects that aimed to quickly generate practical benefit poor farmers – and particularly women – and inform better policy making. During Phase 1, 19 projects (and 2 extensions) selected in 3 Calls for Proposals and involving 12 Canadian and 25 DC organizations, were implemented in 20 countries.⁶

The Phase 1 Funding Agreement called for the present final, summative evaluation, with a mandate to "focus on assessing the objectives of the Funding Agreement with IDRC, the relevance and performance of the fund, including identifying results achieved, and overall value for money." In response to the set of questions provided in the evaluation's Terms of Reference (TOR), the evaluation team shares 16 Phase 1 findings. They speak directly to the Fund's effectiveness, efficiency, relevance, sustainability, and to the key cross-cutting issues of gender equality and environmental sustainability. The present evaluation responds to the TOR, fulfilling both learning and accountability requirements.

2.2 Effectiveness

2.2.1 Overall Effectiveness

Finding 1: During Phase 1, CIFSRF achieved all but 1 of its planned targets for immediate outcomes, auguring well for the longer-term achievement of the intermediate outcomes and strong progress towards the ultimate outcome.

During Phase 1, CIFSRF achieved 12 of the 13 targets set for its immediate outcomes. All project teams field-tested potential innovations for improving Food Security (FS). Most participants expressed high levels of satisfaction with the partnerships, reporting that relevant capacities for research, management

and communication were strengthened. More than 140 technologies were developed and field-tested, and 167 peer-reviewed publications were produced. All projects trained women and men on ways to support the use of new technologies, all projects received inquiries regarding potential solutions to FS issues, and all were referred to in the media. The only outcome target that was only partially achieved called for the majority of partners to secure complementary funding for their projects. Information collected by the evaluation team confirmed that when judged against CIFSRF's own expected results, indicators and targets, very substantial progress was made in strengthening the capacity of Canadian-DC partnerships and in generating new knowledge on environmentally sustainable and gender-sensitive FS applications. Somewhat less progress was made in improving the extension-related abilities of participants to implement and support new FS solutions. Least progress was made in improving awareness and understanding among the Canadian public, policy makers and the development assistance community. A very positive aspect of the Fund was the extent to which it learned from experience and improved its strategies and procedures over time.

2.2.2 Strengthening Canadian-Developing Country Partnerships

Finding 2:

CIFSRF played a key role in establishing and strengthening Canadian-DC partnerships. Partnership building and strengthening contributed significantly to the Fund making progress on many of its objectives; successful projects were generally based on effective partnerships.

CIFSRF effectively support partnerships involving Canadian and DC researchers and practitioners engaged in R4D. A total of 12 Canadian and 25 DC organizations were supported on 19 projects (and 2 project extensions). Partnership and collaboration were real strengths of CIFSRF. Explains one Canadian Principal Investigator (PI), CIFSRF is "promoting partnerships and capacity development among both Canadian and DC researchers, and providing support to each partner equally." (See Annex V) Among PI survey respondents, 75% strongly agreed that CIFSRF contributed to improving the capacity of their partnership.

The diversity of partnerships supported by CIFSRF performed to different degrees, with more successful projects exhibiting most or all of the following characteristics: a clear complementarity of roles in the projects; a diversity of research and development-oriented experience; mutual trust and respect; good communication and coordination; effective leadership; and a history of prior collaboration (see Annex V). New partnerships required time and support to develop and begin performing. CIFSRF Program Officers (POs) provided much-appreciated support to project partners.

2.2.3 Harnessing Canadian Expertise

Finding 3:

Canadian expertise was effectively mobilized, with Canadians widely recognised as having contributed significantly to the success of most projects, if in different ways and to varying extents. Canadian researchers and institutions also benefited from their engagement in the partnerships.

CIFSRF's funding agreement calls for the Fund to "[h]arness Canadian expertise and knowledge in food security related science and technology to develop solutions with and for the developing world." Canadian participation was a funding prerequisite for projects. Where there was little evidence of an appropriate and strong Canadian partner, project proposals were weeded out early in the process. Thus, for CIFSRF Phase 1 funded projects, most IDRC, GAC, Governance Committee (GC) and Scientific Advisory Committee (SAC) members, as well as a strong majority of PIs (both men and women) recognised the valuable contribution of Canadians and Canadian expertise.

Canadians were widely recognised as having made important methodological, technological and/or technical contributions to projects, all of which were key project success factors¹⁰ (see Annex VI). For

Phase 1, 62.5% of survey respondents strongly agreed and 31.2% agreed that CIFSRF contributed to the increased use of Canadian expertise in applied FS research. "Canadian expertise has been invaluable. The project could not have happened without the technological know-how of the Canadian experts on this team..." explained one DC partner. The specific contribution of Canadians and of Canadian expertise varied from project to project. Most key stakeholders from Canada and DCs also recognized and valued the quality of learning from which Canadians benefited, as expressed by a broad range of stakeholders in interviews and in survey comments. Overall, CIFSRF partnerships enabled innovative research and learning for both Canadian and DC partners in different through comparable measure.

2.2.4 Generation of New Knowledge

Finding 4: CIFSRF supported an impressive volume of knowledge production, reflected in the large numbers of studies completed, technologies developed or tested, and reports and publications produced.

According to the Phase 1 CIFSRF Final Narrative Report: all projects used participatory approaches and all were completed successfully; 144 application-ready technologies were developed; and 167 articles were published in peer-reviewed journals (not counting 40 articles in press).13 A book derived from CIFSRF gender work was also prepared¹⁴ (See Annex VII). There was especially rapid scientific knowledge production in projects working on bovine vaccines and use of nano-technology to retard fruit maturation and spoilage. The publication record of projects was beyond the Fund's targets. Additionally, many publications based on Phase 1 research have been issued after the end of the phase. IDRC's "open access" policy made them widely available to researchers, though open access to journal articles doesn't ensure that interested parties in DCs are aware of the research results. Some interviewees at project field sites reported that they did not have access to results of research studies they had worked on.

Beyond peer-reviewed publications, a vast amount of useful knowledge was accumulated locally. Information on agriculture, nutrition and FS, collected through baseline and other research studies, is now available for local use. Researchers also report learning useful new skills related to: working in partnership with diverse stakeholders; project management; communication; integrating gender equality and environmental considerations into their work; and becoming sensitive to small farmers' (especially women's) circumstances, priorities, and knowledge. In some cases, participants reported "transformational learning" and "changed mindsets."

Information available in CIFSRF's M&E system on research activities and results is sometimes difficult to interpret. Fund documents did not use clear and consistent definitions of such terms as "technologies," "innovations," and "application-ready solutions" (see Annex VIII). This may be one reason why survey results show somewhat differing perceptions of Canadian and DC PIs as to the generation of new innovations: Whereas 70% of Canadian PI's strongly agreed that "CIFSRF has generated new FS innovations," less than 50% of DC PIs strongly agreed. Such differences in perception may reflect different views on what an "innovation" is or the extent to which tested technologies are truly "application-ready".

2.2.5 Improved Ability of Developing Country Organizations to Implement and Support New Food Security Solutions

Finding 5: The Fund made important contributions to *individuals'* ability to transfer technologies to intended users/beneficiaries, but it is unclear if it contributed to *organizational* capacities in this area.

To ensure that the new knowledge generated reached and benefitted small farmers (particularly women), the Fund sought to improve the ability of participating organizations to implement and support

new FS solutions. This set of activities and outputs correspond to the elements of extension or capacity building in DCs.¹⁵ 90% of CIFSRF's projects reported having developed training / knowledge transfer tools and disseminating them to participants, mostly in local languages. Nearly 128,000 people were reported to have participated in 410 training or educational events organized by project teams. More than 383,000 individuals were reported to have been adapting and using CIFSRF technologies at the end of the project (129,397 direct beneficiaries, and 253,618 individuals not directly involved in the research) (see Annex IX).

In the Fund's PMF, the indicators used to monitor progress toward the immediate outcome, "Improved ability of DC organizations to implement and support environmentally sustainable FS applications for smallholder farmers, especially women," are not valid indicators of organizational capacity. Instead, they reflect the extent to which activities were carried out, or of farmer use of new technologies. Thus, the achievements reported by PI's through the Fund's annual surveys, reflect an impressive amount of activity aimed at knowledge sharing and supporting uptake and use of new practices. However, with the available information, it is impossible to judge the extent to which the DC organizations strengthened their capacities to conduct future extension and knowledge-transfer activities.¹⁶

2.2.6 Awareness and Understanding of New Food Security Solutions

Finding 6: Despite achieving or surpassing most of its planned targets in this regard, relatively little progress was made in improving awareness and understanding, most notably among the Canadian public.

While the overall goal of improving awareness and understanding of solutions to FS issues in DCs was quite ambitious, the three indicator targets and seven output targets were very modest. ¹⁷ By the end of Phase 1, most were reported to have been either fully achieved or surpassed. Initially focused on generating interest in CIFSRF by promoting the Calls, the Fund's communication strategies were refined during Phase 1, including an evolving articulation of IDRC/GAC roles and of project-level responsibilities for engaging stakeholders. Still, stakeholder interviews and survey responses indicate important gaps between CIFSRF's goals for improving awareness and understanding and its results, particularly in relation to the Canadian public.

In the survey, PIs generally reported that efforts to reach the *development assistance community* and the *general public in DCs* had been most effective (95.8% and 85.4% agreed or strongly agreed, respectively), while those aimed at *policy makers in DCs* were moderately effective (79.1%). According to PIs, CIFSRF efforts aimed at improving awareness and understanding among the *Canadian public* were least effective (58.4%) (see Annex X). "The government is not getting credit for the good work it is doing, and the benefits that have been produced by its investments... The story needs to be told better", explained one Canadian key informant, conveying a broadly held perception among PIs, GAC and IDRC that communications could more effectively promote the program and project results throughout.

2.3 Relevance

2.3.1 Food Security Needs of the Poor

Finding 7: CIFSRF Phase 1 results were broadly relevant to the FS needs of the poor, small-scale farmers and women in DCs, illustrating complementary FS enhancing pathways. However, processes for the identification, initiation and selection of projects comprised little to no representation of certain key beneficiaries. Overall, some shortcomings were in evidence in the structures and mechanisms through which program relevance for poor, small-scale farmers and women was to be ensured.

In Phase 1, program relevance to FS was prioritised and pursued in multiple ways. It was a key component of proposal development and project selection. A diverse portfolio representing complementary FS enhancing pathways was identified (see Annex XI), often using a proof of concept approach. POs provided consistent and strategic support to help researchers maintain an emphasis on priority development outcomes, with notable respect to these beneficiary constituencies. Based on available data, there was diversity among the projects on the extent of their direct relevance for the poor, and specifically for small-scale farmers and/or for women. In evaluation interviews, community-level beneficiaries routinely noted FS enhancing benefits in projects where innovations had been tested at farm level. Overall, the CIFSRF Phase 1 Final Report reported a 10-20% increase in productivity and livelihood (measured as income), and measurable improvement in nutrition over baseline. As reported by grantees, 100% of those originally involved in the research adopted and used technologies generated by the project.

Based on interviews and 'Stories of Change', CIFSRF projects were generally initiated and selected for funding by professionals. The participation of relevant DC community-level beneficiaries (i.e. poor, small-scale farmers and/or women) in the identification of needs/demand and in project formulation was not explicitly included among criteria for the evaluation of Concept Notes and Proposals. Collaboration with local communities was similarly not included as criteria (as compared with collaboration between applicant partners). Representatives of beneficiaries were not explicitly included in the GC or SAC, and therefore did not participate in setting program priorities or in project selection. Thus, some shortcomings were in evidence in the structures and mechanisms through which program relevance for poor, small-scale farmers and women was to be ensured. As articulated by one Senior GAC official, "[r]elevance for food security is hard to tell until you actually talk to women — to what extent were you involved in the design of project? Did you voice your needs and priorities at that time? Did the proposal reflect that voice at the time?"

2.3.2 Canadian International Development: Policies and Programs

Finding 8:

Program goals were consistent with Canadian international development policies and programs. Unsurprisingly, there was no evidence that higher-level program alignment translated into direct relevance of CIFSRF research results to Canadian international development policies and programs. Separate from the relevance of CIFSRF results to GAC policies and programs, lessons learned from CIFSRF overall fed into internal GAC discussions regarding policies/programs.

Increasing FS is one of Canada's top five thematic priorities for international development funding, highlight by the GAC Food Security Strategy (FSS). CIFSRF is the flagship program for the Research and Development pillar of the FSS, feeding into to the Sustainable Agricultural Development and Nutrition pillars, providing a clear contribution to the FSS overall. The Fund is also aligned with GAC cross-cutting themes, with a particular emphasis on gender. GAC representatives were consistently involved in the design and governance of the Fund, playing an important role in the review/assessment of SAC concept notes and proposals, in the strategic decision-making of the GC, and in the joint approval process. In addition to providing key overall guidance, this hands-on investment contributed towards policy coherence.

Unsurprisingly, there is no indication that CIFSRF results were directly integrated into GAC programming or policies. There are many factors affecting program/policy uptake (see point 3.4.3 for details). It is important to note that with research results only available towards the later end of the program cycle, it is too early to expect visible integration. It may also be unrealistic to expect that evidence will necessarily have direct impact on policies and programs¹⁹, especially in a short time frame. Distinct from the use of research *results*, the CIFSRF experience *overall* has fed into policy and programming

discussions within GAC, including: the possibility of using the CIFSRF model for other development innovation funding²⁰; Partnership for Development Innovation Branch (PDI) reflections on innovation; and Policy Branch discussions on the future of the FSS, specifically with regards to the role of R4D.

2.3.3 Private Sector Priorities

Finding 9:

Private sector engagement was an area of significant learning for CIFSRF. Phase 1 projects proved highly relevant to small-scale private sector actors, and less so to national private sector actors and multinational companies. The program showed significant potential for increased engagement with national level private sector actors.

Broadly speaking, CIFSRF has engaged the private sector in diverse ways. Private sector actors were members of the SAC. Outreach and engagement were conducted with the private sector through formal meetings, presentations and research outputs geared to them. ²¹ CIFSRF attracted private sector organizations as project partners (though less than universities, NGOs or government). For greater insight into CIFSRF's relationship and engagement with the private sector, the very meaning of "private sector" requires clarification. The evaluation team found it useful to distinguish three categories: (a) small-scale actors in DCs, (b) national level private sector actors in DC, and (c) multinational actors. ²²

Empirical evaluation data shows very high CIFSRF relevance to *small-scale private sector actor* needs (see Annex XII). In reporting 'Stories of Change', most projects demonstrated a clear role for these actors with their value chain directly increasing benefits to poor and marginalized groups. They also showed a high uptake of innovations by this group of actors. The data for *national level private sector actors* shows that Phase 1 outreach efforts generated interest in CIFSRF. Relevance to this group was potentially strong, and progress was made in engaging them, though they were less involved than small-scale private sector actors. They were involved as third party organizations and in testing technologies. They showed promise in roles such as commercializing innovative products, adding value, expanding markets, and reaching consumers more broadly. This group of actors is also expected to derive income benefits from their engagement. For the third category, *multinational private sector actors* (whose involvement was not targeted), there was little demonstrated Phase 1 CIFSRF relevance or involvement.

2.3.4 Contributions to Thinking and Debates on Food Security and Agricultural Innovation

Finding 10:

Views on the extent of the Fund's contributions to thinking and debates on FS and agricultural innovation vary considerably. Many of those close to the Fund believed it contributed significantly to thinking and debates on FS and agricultural innovation, while others not directly involved with CIFSRF perceived fewer contributions.

Our interviews and survey of PIs indicate that many of those directly engaged with the Fund (e.g. PIs, POs, and members of the SAC and GC) have been stimulated to re-think their assumptions concerning agricultural innovation and FS. New insights gained from work with the Fund have informed their decision-making and interactions with colleagues. Within IDRC's AFS program, the Fund has stimulated what some refer to as a virtual "revolution" in thinking and approaches.

Within the project teams, some PIs report "transformational changes" in their understanding of agricultural innovation and FS (see Annex XIII). Through their publications and participation in professional conferences and meetings, Canadian (and to a lesser extent DC) researchers contributed to debates on aspects of agricultural innovation and FS within their professional circles. In DCs, the interactions among researchers, farmers, service providers, and governmental officials that took place in meetings and other project activities stimulated participants to think more broadly and holistically about

agricultural innovation and FS interventions. These interactions also helped to inform and influence local and national policies in DCs.

The Fund has also influenced thinking and debates on FS and agricultural innovation within some parts of the GAC, particularly where key individuals worked directly with the Fund (for example, as members of the SAC or the GC). In contrast, most of the specialists in international agriculture and FS who were consulted and who were not directly involved with the Fund responded that they were either unaware of the Fund or were unaware of its contributions to thinking and debates on agricultural innovation and FS.

2.4 Sustainability

Finding 11:

2.4.1 Likelihood of Continuing Results

2.4.1 Likelillood of Collilliality Results

The provision of Phase 2 scaling up funding and support encourages but does not ensure the continuation, expansion and sustainability of benefits and results beyond Phase 1. It did however enable Canadian-DC partnerships to persist, a much-valued benefit of the program. Without Phase 2 support, some valuable Phase 1 results and benefits from most remaining projects were likely but not certain to persist.

While it is impossible to ascertain with certainty whether and how CIFSRF results and benefits might continue beyond Phase 1, a number of factors favour such sustainability. Continued CIFSRF funding and support for Phase 1 projects into Phase 2 is an indicator but by no means guarantee of sustainability. It does however enable Phase 1 Canadian-DC partnerships to carry on for a number of years, a much valued result and benefit, notably since CIFSRF is funded by GAC/PDI. Beyond partnerships, Phase 1 was primarily devoted to research in search of solutions to food insecurity. Phase 2 focuses on advancing the scale-up and societal institutionalisation of the solutions. Phase 2 funding and concomitant *opportunity* for scale-up and institutionalisation is valuable, though it is not a guarantee of the continuation, expansion and thus sustainability of results and benefits.

In total, 63% of projects from Phase 1 received Phase 2 funding (see Annex XIV). The reasons for Phase 1 projects not receiving funding into Phase 2 were multiple, diverse and well-reasoned. These included a lack of scale up focus, significant partnership challenges, management and leadership issues, and to a lesser extent contextual political issues. For these projects, available evidence from project 'Stories of Change' suggests that a number of results and benefits are likely to persist beyond Phase 1. These include (see Annex XIV): valued economic developments (e.g. access to new markets), improved food quality and safety, improved management systems (e.g. distribution and marketing), and some direct community benefits including increased income.²⁴ Beneficiary community members expressed it concisely during a focus group discussion (FGD), "[w]ithout project support, we will continue but it will be much harder because of the costs." A strong majority of Phase 1 Project PIs reported results of their research having been adopted by poor communities and small-scale farmers, though to a lesser extent by small-scale women farmers.

2.4.2 Additional Human and Financial Resources

Finding 12: CIFSRF partners were effective in securing additional human and some financial resources for their projects during Phase 1, only partially achieving targets for complementary funding. Such complementary human and financial resources are important in preventing partner and/or project dependency on CIFSRF.

Towards favouring the sustainability of project benefits and results, CIFSRF encouraged project partners to seek out additional, external financial and human resources. For Phase 1, the program partially

achieved its target of a "majority of partners (50% + 1) able to secure complementary funding at least once during the project." Overall, 35% of partners received complementary funding at least once during the projects. Survey results suggest that Canadian PIs were more effective at securing external funding and thus diversifying their resource base than DC counterparts.25 Also, 58% of the projects saw additional financial resources secured, thereby tempering dependency concerns somewhat.26

Survey results indicate that DC PI respondents were more successful in securing additional human resources. They did so primarily through the training and participation of graduate students on projects. A total of 202 Masters students and 69 PhD students participated in the projects, undertaking tasks that included but were not limited to data collection, data analysis, report writing, and grant writing. The diversity of graduate students working on these projects reflects CIFSRF's objectives of developing strong Canadian-DC partnerships. Of 271 students overall, 48 were Canadian, 215 were from DCs, and 8 were nationals of other developed countries (5 American, 1 British, 1 French, 1 Saudi Arabian). A solid majority of these students were women (160/271, or 59%; see Annex XV). In interviews, some project PIs emphasized the value of graduate students. As expressed by one Canadian PI, "graduate students are the backbone of [our university] researchers being able to perform this project..."

2.5 Cross-Cutting Themes

2.5.1 Gender Equality

2.3.1 Gender Equanty

Finding 13:

Adopted early on, CIFSRF's gender strategy was catalytic in building awareness around gender equality among project teams, though some concerns remained at the end of Phase 1. Most projects contributed to increasing access to resources and nutritional benefits for women and their families while some contributed to increased decision-making among women.

From the outset, both IDRC and GAC were committed to integrating gender equality as a cross-cutting theme, which formed an integral part of the rigorous Concept Note and Proposal evaluation process (see Annex XVI). Early on, IDRC identified a number of shortcomings with CIFSRF's approach, which limited the full integration of gender equality across the Fund. To address some of these shortcomings, IDRC clarified expectations to grantees in the Calls for Proposals, and in 2012 developed a gender strategy through which it delivered a series of gender workshops and writeshops. This resulted in project teams gaining a greater understanding of the way in which gender equality could be integrated into projects and learning how to report on gender outcomes. IDRC had limited success, however, in creating a network aimed at facilitating co-learning around gender equality among project teams. Further, the male-dominated gender composition of project teams as well as limited expertise and budget for gender equality at project level remained a concern at the end of Phase 1.

The evaluation team found evidence through document review, survey data and field visits, including through FGDs with women beneficiaries, that project innovations contributed to increasing the agricultural yields and income of women farmers. Women beneficiaries testified that increased yields and polycropping resulted in more diversified foods and nutritional benefits for women and their children. In several projects, women reported having increased control over the way in which they spent the income they earned, some having reported using additional revenues for healthcare, children's education and to purchase household products. While some projects reported contributions to increased control over productive assets and land management, women's participation in decision-making processes that were not specifically related to personal income were not well documented. While not a Fund objective, IDRC tracked and reported on CIFSRF contributions to reducing women's drudgery; overall, the there is little evidence of CIFSRF contributing to reducing women's drudgery in agriculture 32 (see Annex XVI).

2.5.2 Environmental Sustainability

Finding 14:

CIFSRF's environmental strategy was designed to ensure that funded projects were consistent with Canadian policy on environmental sustainability. CIFSRF projects were reported to have had no significant negative environmental impacts over the course of Phase 1, delivering some valuable environmental benefits and services in DCs.

CIFSRF was aligned with Canadian policy on environmental sustainability, notably GAC's Policy for Environmental Sustainability and the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals. A Strategic Environmental Assessment (SEA) of CIFSRF was published in March 2010, articulating 6 globally recognised considerations and principles for ensuring that the fund avoided harm and favoured environmental improvement.³³ Favouring the fund's environmental objectives, a 'sustainable intensification' approach was developed.³⁴ Environmental sustainability considerations were integrated into all stages of the program, as per commitments written into the funding agreement between GAC and IDRC.³⁵ This included Calls for Proposals, assessments of Concept Notes and Proposals (notably by the SAC³⁶), and project reporting. IDRC provided ongoing support and feedback to grantees to ensure that environmental sustainability requirements were well understood and properly pursued.³⁷

Both Canadian and DC PI survey respondents agreed in strong and roughly equal measure that CIFSRF's environmental sustainability strategy was appropriate.³⁸ Members of the SAC and GC largely perceived the strategy to have had beneficial implications for the projects. 80% of Canadian PIs and 87.5% of DC PIs agreed or strongly agreed that results generated by CIFSRF-supported research for development are environmentally sustainable. Significantly, no negative environmental or socio-economic impacts were reported for any of the research projects carried out in Phase 1. Also, 85 of 144 project 'innovations' tested during Phase 1 reportedly contributed to environmental sustainability.³⁹ As well, "11 of the projects developed innovations that directly measured or tested environmental sustainability parameters, such as soil degradation and biodiversity."⁴⁰ Only one formal environmental assessment was triggered.⁴¹ Finally, all CIFSRF-funded projects were geared in some respect towards providing sustainable livelihood benefits, in the short or medium-term, with varying degrees of success (see Annex XVII).

2.6 Efficiency

2.6.1 Program Management

Finding 15:

Phase 1 of CIFSRF was delivered efficiently, within its overall timeframe and budget. However, both the implementation of the Call for Proposals process and M&E were under-resourced. Staff responded by reallocating resources, adapting internal processes and working overtime.

IDRC staff and implementing partners delivered CIFSRF program outputs on budget and on time, with the exception of several brief project extensions⁴². However, the fixed budget, inflexible timelines and high touch nature of CIFSRF's programming model resulted in an overuse of staff that required staff to 'volunteer' time. CIFSRF stakeholders identified the following key 'causes' for the high human resources required to execute the program: the use of a Calls for Proposal mechanism (and high response rates), the extensive accountability/reporting requirements, and the emphasis on partnerships (see section 2.2.2). The time and effort required to implement a Call for Proposals mechanism far exceeded the program's projections.⁴³ IDRC staff responded by reorganizing the budget to divert twice as much funding to Technical Reviewers and restructuring the Calls process. As a result of these changes, staff noted a progressive increase in the quality and diversity of proposals received.⁴⁴

In 2013, CIFSRF's transitioned from Excel-based reporting to an online reporting tool. CIFSRF partners report receiving adequate and appropriate support and information to conduct project level M&E and report on results. This is another example of how IDRC staff developed new processes and adapted existing ones to respond promptly to the program's needs. However, the frequency and depth of reporting was considered a burden by some implementing partners.⁴⁵

Strengths and Weaknesses for Program Management: Key *weaknesses* of CIFSRF program management were: insufficiency of resources given the program's complexity; stress that lack of resources put on staff and resulting implications for workplace health at IDRC; short timelines for project completion; and bureaucratic accountability requirements. These issues are primarily program design concerns that had effects on implementation. Key *strengths* of the CIFSRF program relate to its people and processes (see Annex XVIII). Stakeholders provided overwhelmingly positive feedback on the efficiency of CIFSRF staff. 65.9% of surveyed stakeholders strongly agreed and 31.8% agreed that CIFSRF provided good value for the funds expended.

2.6.2 Governance Arrangements

Finding 16: CIFSRF's governance arrangements were suitable and generally worked well.

However, they lacked an appropriate diversity of participants and expertise, given the mandate of the Fund.

Among the strengths of the Fund's governance arrangements was the two-tiered structure of having a consultative SAC making recommendations to a decision-making GC (see Annex XIX). This structure is regarded as providing a balance between the Fund's applied and operational dimensions, and the scientific rigour sought through the review process. Co-chairing of IDRC and GAC, and the bridging role played by the co-chairs between Committees was productive, ensuring strategic oversight by both partners, policy coherence, and a shared understanding and accountability to the program. Communication between the SAC and GC, and with IDRC and the GAC was very good overall.

Strengths of the SAC stem from its high-caliber expertise and efficiency in fulfilling its commitments. Informants expressed strong satisfaction with the SAC. The GC comprised high-level executives, which ensured visibility for CIFSRF as well as efficiency in overcoming bureaucratic roadblocks. The GC was central in ensuring good relations between IDRC and GAC. According to one GC member, this was "the most well run executive Committee in which I have ever participated." A further strength was the role played by IDRC in the review process, as a productive and effective player in supporting the Committees.

Interviewees noted the need for improvement in the diversity of expertise on both Committees for it to be commensurate with the diversity of concepts, content, and contexts that present themselves in the submissions. A broader diversity of expertise, in particular ensuring participation from experts from the Global South, representatives of beneficiary groups and Canadian civil society at governance levels, would also enable the GC and SAC to raise critical questions appropriate to innovations, scaling up and the contexts in which they take place. Questions around the diversity of both Committees extend to considerations of the gender balance.

3 Phase 2: Formative Evaluation

3.1 Introduction

In 2013, a second phase of the Canadian International Food Security Research Fund (CIFSRF) was launched, with a 5-year duration and a total budget of CAD \$62.5 million. The Funding Agreement notes that Phase 2 would build on the "food security research results and innovations for the benefit of subsistence farmers... support more food security research in priority areas, and ... bring the most promising research results from both Phase 1 and Phase 2 to a scale where they can directly benefit subsistence farmers (particularly women) and contribute to global food security for the long-term." Phase 2 of CIFSRF advanced the following four objectives 1.

- a) Increase food security in developing countries by funding applied research in agricultural development and nutrition;
- b) Apply Canadian science and technology expertise in collaboration with developing-country partners to address food security;
- c) User research results to inform food security policies and programs; and,
- d) Scale up innovation and promising research results and innovations.

The Funding Agreement indicates that Phase 2 funding is to be made accessible to Canadian and developing country (DC) institutions, private sector organizations, civil society organizations, research institutions, and international agencies specializing in food security (FS) research and policy delivery. Project teams must include at least one Canadian and at least one DC partner, and need to demonstrate that the program of work was jointly prepared and jointly managed. An important aim of Phase 2 has been to demonstrate how participants can encourage the widespread use of these innovations at farm level in DCs. The approaches for scaling up are expected to apply best practices in environmental sustainability and focus on the meaningful participation of women, women farmers, and other food insecure and vulnerable groups. They are to engage the private sector and civil society groups in Canada, internationally, and in DCs to apply the research results for maximum impact. Via 3 Calls for Proposals, 18 partnership projects have been selected for CIFSRF support during Phase 2. The projects, involving 16 Canadian and 26 DC organizations, are being implemented in 17 countries.⁵⁰

The Phase 2 Funding Agreement calls for a mid-term evaluation of CIFSRF to gauge the Fund's progress in relation to its planned outcomes and to inform ongoing implementation. In response to the set of questions provided in the evaluation's Terms of Reference (TOR), the evaluation team shares 18 Phase 2 findings in this report. They speak directly to the Fund's effectiveness, efficiency, relevance, sustainability, and to the key cross-cutting issues of gender equality, environmental sustainability and governance. The present evaluation responds to the TOR, fulfilling both learning and accountability requirements.

3.2 Effectiveness

3.2.1 Increasing Use of Canadian Expertise and Knowledge

Finding 17:

CIFSRF has been effective in favouring the continued and increased use of FS-related Canadian expertise and knowledge, notably through support of Canadian-DC partnerships. An ongoing challenge has been the limited time available to developing new partnerships with both Canadian and DC actors. Overall, most stakeholders recognise the valuable if diverse and changing contributions of Canadians and Canadian expertise.

For their work on 18 projects during Phase 2, a total of 17 Canadian and 26 DC institutions received CIFSRF funding, a notable increase from Phase 1.⁵¹ Support to Canadian-DC partnership has been an important means by which the fund has favoured and increased the use of Canadian expertise and knowledge. CIFSRF exceeded its target of at least 15 DC *organizations* actively using Canadian knowledge and resources. It is well on its way to meeting its target of 100 DC *researchers* doing so (see Annex XX).

For Phase 2, overall, 73.3% of survey respondents strongly agreed and another 26.7 agree that CIFSRF has been contributing to improving the capacity of Canadian-DC partnerships. Across Calls 4 through 6, project partners expressed strong appreciation for CIFSRF Program Officer (PO) support received early and through the ongoing development of partnerships. Of note, Call 5 was specifically designed to strengthen pre-existing partnerships developed in Phase 1.⁵² Financial and other support provided to project partners has been invaluable to the partnerships. Pre-inception workshops and inception meetings are widely recognised as key elements in favouring effective partnerships.

Overall, project partners have appreciated the methodological, technological and technical contributions of Canadians. For Phase 2, 71.1% of survey respondents strongly agreed that CIFSRF is contributing to increased use of Canadian expertise in applied FS research. The specific contribution of Canadians and Canadian expertise varies from project to project. At the same time, as the contextual dimensions of scaling up increase in importance, the specific Canadian contribution of some original Principal Investigators (PIs) is also decreasing, which is to be expected. Responding to this, many new Canadian organizations and experts have been brought into projects, contributing new skills, techniques and experiences appropriate to scaling up objectives, priorities and practices of projects.⁵³ The effective development of such partnerships is time-consuming, and project partners have consistently expressed that the time available to them for this has been challenging, even restrictive.

3.2.2 Improved Developing Country Organizational Capabilities to Conduct Applied Research

Finding 18:

CIFSRF partners widely report a strengthening of their organizational capabilities to variably undertake research and test solutions, pursue project management, and take important steps towards taking their research to scale. They report lesser enhancement of their abilities to strategically communicate and share their work with wider audiences or participate in policy processes.

CIFSRF has reportedly strengthened DC partner organizations as well as Canadian organizations. Pls report learning new processes and methodologies, acquiring relevant new knowledge and developing diverse strategies, in terms of the following capabilities (as per CIFSRF's target and indicators; see Annex XXI):

- Develop and Test Solutions: Through training, experience-sharing, methodological and technical processes, partnerships, etc., DC partners report increasing their ability to develop and test solutions.
- Design and Compare Scaling Up Approaches and/or Models: DC-Canadian partnerships are reported as key capacity factors in designing scaling up approaches, though less in comparing different models.
- Achieve Impacts at Scale: DC partners value CIFSRF's contribution to their strengthening of ties with communities, the private sector and national governments.⁵⁴
- Develop and Apply Strategies to Inform Policy: Capability development in this respect is reportedly very mixed, and generally quite low.⁵⁵
- Co-manage Multi-partner Research Initiatives: Canadian and DC partners report becoming more adept at managing multi-partner research initiatives.
- Communicate and Disseminate Results: PIs report little change in their organization-level capability to communicate and disseminate results overall, to date.

According to the CIFSRF survey, 100% of survey respondents agreed or strongly agreed that the ability of DC organizations to undertake relevant research is being strengthened through CIFSRF, with 66.7% *strongly agreeing*. Overall, the Fund is well on its way to meeting its target of a majority of CIFSRF partnerships (50%+1) *expressing* that their capacities have increased during Phase 2 (see Annex XXI).

3.2.3 Improved Ability of Developing Country Organizations to Implement and Support New Food Security Solutions

Finding 19: The Fund seems to be on track to achieve its outcome targets in this area. But it is not clear if this will lead to strengthened capacities of participating organizations to carry out future extension-related activities.

This area of the Fund's work is concerned with strengthening the ability of participating organizations to promote and support the adoption and use of the technologies or solutions developed through applied research. In Phase 2, the Output Indicator for this area is the number of units of the solution (e.g. the number of vaccine doses, kg of seed, number of books or nanotechnology wraps or boxes) delivered or made available to beneficiaries and end users. The target for this indicator is to be set on a project-to-project basis. There are 2 indicator targets for the corresponding Immediate Outcome: 300,000 end users who have participated in project activities (at least 30% women); and, 100,000 smallholder farmers who have been trained in "CIFSRF solutions" (at least 30% women). The information available indicates that the Fund is on track to achieve its planned outcome targets (see Annex XXII). However, indicators for this area do not directly relate to organizational capacities, and the Fund does not appear to have a realistic program strategy for strengthening organizations' capacities to carry out future extension activities.

3.2.4 Consolidation and Scaling Up

Finding 20: CIFSRF's Phase 2 emphasis on scaling up is an appropriate continuation of the research-based approach of Phase 1 as it strikes a good balance between consolidating and scaling up the best of Phase 1 innovations and identifying new high-potential innovations for scaling up.

Through a portfolio approach, CIFSRF strikes a good balance between consolidating and scaling up the best of Phase 1 innovations and identifying new high-potential innovations for scaling up. Overall, 64.4%

of PI survey respondents strongly agreed and another 15.6% agreed that CIFSRF is scaling up promising new FS innovations. As well, 66.7% of survey respondents strongly agreed and another 24.4% agreed that Phase 2 provides an appropriate continuation of Phase 1. A total of 12 Phase 1 projects (or 63%) received funding into Phase 2. These projects build upon the partnership support and development, research, and to a lesser extent policy and awareness raising work of Phase 1. ⁵⁶ Challenging and weaker Phase 1 projects were effectively weeded out of the scaling up process (see Annex XXIII). All 6 Call 3 projects were selected for scaling up through Phase 2. ⁵⁷ In addition, 7 completely new and appropriately diverse projects were selected through a competitive process in Calls 4 and 6, based on an assessment of their potential for scaling up. In particular, Call 6 has been unique in requiring that projects develop a business case for their innovations, which has challenged project teams to innovate outside their comfort zones, with implications that are as yet not clear or understood.

At this point in the Phase 2 trajectory, CIFSRF seems on track to produce a diversity of FS solutions that are in various stages of being scaled up. According to the CIFSRF Third Annual Report, as of June 2016, "there are currently 37 solutions (products, services and models) and 37 scaling up pathways being tested by the 18 projects..." (see Annex XXIII). While the majority of carried-over Phase 1 innovations were 'product' oriented, new Phase 2 projects and innovations are understood by CIFSRF staff to have "filled an important gap in terms of services and policy-related innovations," explained one key IDRC stakeholder. With available data, it is impossible to project the scale at which innovations are likely to be used by the end of Phase 2, though the potential beneficiaries are in the millions. ⁵⁸

3.2.5 Generation of Knowledge on Sustainable Food Security and Nutrition that Benefits the Poor

Finding 21: The Fund's knowledge production has moved beyond the development of environmentally sustainable and gender-sensitive research applications to include research on the more challenging area of scaling research results.

While Phase 1 focused on developing new technologies for improving FS, Phase 2 added the important challenge of developing and testing models for scaling up the application of research results, to ensure that the benefits of agricultural and FS research reach large numbers of the food insecure in DCs. Given the current high priority placed on scaling up in the international development community, results of CIFSRF-supported research on scaling up may be of broad interest and utility in the future.

During Phase 1, the Fund monitored 4 types of knowledge outputs: number of research projects completed; publications issued; technologies developed or tested; and beneficiaries involved in testing technologies. For Phase 2, reflecting the new interest in scaling up, progress is being monitored for 3 knowledge outputs: research projects completed; application-ready FS solutions tested and fine tuned; and scaling up models field tested.⁵⁹ Information available in the Fund's program-wide database, results of our own survey of PIs, and our stakeholder interviews all indicate that good progress is being made in establishing partnerships and project teams and in testing or fine tuning of proposed solutions and scaling-up models (see Annex XXIV). These activities are stimulating learning and knowledge production at the local level. However, the Fund does not appear to have strategies for sharing knowledge across the different project teams, for drawing general conclusions and formulating lessons, and for making these conclusions and lessons widely available to all those concerned with international agriculture and FS.

3.2.6 Improved Awareness and Understanding

Finding 22:

CIFSRF's Phase 2 communication strategy is integrating lessons learned from Phase 1. Indicators and targets were augmented and slightly modified. Greater emphasis was also placed on communicating impact, creating complementarities between project and program-level communication, and offering communication support to projects. Still, CIFSRF's effectiveness in improving awareness and understanding remains to be seen.

CIFSRF's 'Communications and Engagement Strategy 2016-2018' is addressing challenges raised in Phase 1 by shifting away from a "one-way model of dissemination" to an "interactive and productive model". It places greater emphasis on planning for communication early, on communicating impact, on overall coherence of messaging, and on furthering specific dissemination activities for targeted audiences. The Fund has appropriately refined PMF indicators and targets corresponding to Immediate Outcome 400.

In practice, results of the strategy's changes remain to be seen. PIs survey respondents reported CIFSRF Phase 2 as most effectively contributing to improved awareness and understanding among *small-scale* private sector actors in DCs (88.9% agree/strongly agree). They report moderate effectiveness reaching policy-makers in DCs (80% agree/strongly agree), private sector national level actors in DCs (77.7%), and the general public in DCs (73.3%). Least effectiveness was reported with respect to the general public in Canada (57.8%), the multinational level private sector (57.71%) and the development assistance community in Canada (49.2%). Project site-visits also suggest the quality of awareness and understanding of CIFSRF within GAC and Embassy structures in-country varies, despite the Fund having a few systems in place at multiple levels for GAC engagement⁶⁰. 60% of GAC stakeholders interviewed highlighted challenges pertaining to communication and awareness about CIFSRF within GAC.

Overall, CIFSRF continues to report a large volume of varied program and project-level communication outputs, including press releases, photos, social media postings, project profiles, and newsletters. However, the monitoring methodology remains heavily output oriented such that outcomes and *influence* are exceedingly difficult to gauge; indicator targets capture effort without being able to assess understanding or to track effects on the stakeholder group in the short-to-medium term (see Annex XXV).

3.2.7 Developing Country Policies and Programs

Finding 23: CIFSRF Phase 2 is on track to meet its targets with regards to the use of research results to contribute to more informed public policies and programming related to FS and nutrition in DCs.

PMF targets are "at least 10 policies, plans and/or programs informed by CIFSRF phase 2 research results; 100% of the projects have informed at least 1 policy". Phase 2 reports are available until June 2016. For these targets, the reports states, "no results to report on yet". However, the evaluation team sampled 6 out of 18 Phase 2 projects for deeper analysis and it is therefore possible to provide an updated assessment on progress. Based on interview data, all sampled projects are either influencing or informing (50%), or are on the way towards influencing or informing (50%) policies and/or programs related to FS and nutrition in DCs (see Annex XXVI). This suggests that the program is on its way to meeting its targets.

This is a notable achievement for a research fund, and illustrates that methods the Fund has chosen for informing and/or influencing policy in DCs (including criteria in project selection for clear policy relevance; the relationship building and buy-in functions of Inception Workshops; the practices of engaging policy-makers early and often, etc), have yielded very positive results. Survey data confirms

that PI respondents feel CIFSRF has contributed to more informed public policies and programming related to FS and nutrition in a number of DCs (see Annex XXVI).

3.2.8 Appropriateness and Feasibility of Ultimate Outcomes

Finding 24: The Fund's ultimate outcome is a laudable aspiration. However, improving the FS of the *most* food insecure may be an overly ambitious target.

Most of those who were consulted felt that the Fund's goals were important and appropriate (see Annex XXVII). However, the Fund should not be expected to achieve some of its planned targets for Intermediate Outcomes and the Ultimate Outcome. Based on previous experience with international agricultural research and development, it is not realistic to expect the Fund to achieve such ambitious global targets as a 10% increase in the number of women, men, girls and boys in poor households with balanced diets throughout the year and 10% increase in local production available for commercial sale in targeted countries and regions (targets for Ultimate Outcome); or a 10-20% increase in productivity, 10% increase in nutrition, and 10% increase in women's access to resources, income and markets (targets for Intermediate Outcomes).

Not all research projects lead to successful innovations,⁶¹ and not all the projects supported by the Fund should be expected to produce useful solutions that could or should be scaled up. Progress is likely to vary across the project portfolio depending upon the strength of the partnerships, the location of the project on the research-to-development continuum, the type of technology developed and its impact pathway. Whereas innovations that are embedded in inputs (e.g., new seeds, fertilizers or pesticides) may be disseminated and applied by farmers rather quickly over large areas, deeper changes in production systems, value chains and consumption patterns generally require local testing and adaptations that take more time. The dissemination and ultimate results of innovations also depend on political, social, economic, and environmental factors that are beyond the control of project teams and the Fund. With these considerations in mind, the Fund has extremely ambitious targets in relation to its temporal horizon and resources (see Annex XXVIII).

3.3 Relevance

3.3.1 Food Security Needs of the Poor

Finding 25:

CIFSRF Phase 2 expected results are broadly relevant to the FS needs of the poor in DCs, focusing on key food security themes (availability, accessibility and use) and illustrating a variety of scaling up approaches. However, processes for the identification, initiation and selection of projects comprise little to no participation of key beneficiaries, namely the poor, small-scale farmers, and women. As scale up takes places, prioritizing FS requires renewed emphasis.

CIFSRF Phase 2 projects are focusing on improving nutrition (13 'solutions'), improving access to resources and/markets and income (13 'solutions'), and increasing agriculture production (19 'solutions'), using a diversity of scaling up approaches. A majority of Phase 2 projects (12 out of 18) are direct or indirect scale ups of Phase 1 projects with currently reported or likely future FS outcomes. Work being undertaken on studying scale up is intended to lead to further understanding of these pathways and approaches, and their potential for impact.

There is diversity among the projects as to how directly relevant they are for the poor, and specifically for small-scale farmers and/or for women. Using the CIFSRF FS pathways model, projects are generally relevant to their articulated target groups, ⁶³ with some exceptions. ⁶⁴ Overall, in evaluation interviews, community-level beneficiaries routinely noted FS enhancing benefits in projects where innovations had

been tested at farm level. One of the challenges of Phase 2 is in maintaining continued relevance to multiple sectors, priorities and stakeholders, while ensuring a primary emphasis on FS. This is an increasingly relevant matter given further complexity and additional actors involved in scaling up processes (see Annex XXIX).

CIFSRF projects are generally initiated and selected for funding by professionals. The participation of relevant DC community-level beneficiaries (i.e. poor, small-scale farmers and/or women) in the identification of needs/demand and in project formulation is not explicitly included among criteria for the evaluation of Concept Notes and Proposals. Collaboration with local communities is similarly not included as criteria (as compared with collaboration between applicant partners). These categories of beneficiaries are not explicitly included in the GC or SAC, and therefore do not participate in setting program priorities or in project selection. Thus, some shortcomings are in evidence in the structures and mechanisms through which program relevance for poor, small-scale farmers and women is ensured.⁶⁵

3.3.2 Private Sector Priorities

Finding 26:

With stronger emphasis on private sector engagement in Phase 2, the Fund has increased the role of small-scale, and to a lesser extent, DC national level private sector actors. Despite increased engagement with multinationals, relevance of this sector to CIFSRF in building FS for the poor remains low.

Phase 2 has had a decidedly stronger emphasis on private sector engagement (see Annex XXX). At the governance level, GC participation was opened up to the Canadian private sector, through an organization representing an umbrella group of private sector companies. At the partnership level, the private sector came to represent the largest type of third party organizations for all three Calls combined. For the first time, CIFSRF Phase 2 reports refer to the most relevant category of private sector actors – the small-scale sector (individual entrepreneurs, SMEs, farmers associations and cooperatives). Survey data shows that 75.5% of Pls strongly agree or agree that results generated by CIFSRF-funded research have successfully responded to the needs of small-scale private actors. A large majority (66.7%) strongly agreed or agreed that research results have been adopted by this group.

National level, DC private sector actors were included in a higher proportion of funding applications in Call 6 as compared with Call 4. Their numbers as research partners, as well as third party organizations, rose from Call 5 to Call 6. Empirical data shows that they fill various valued roles in projects. ⁶⁹ 68.9% of survey respondents strongly agreed or agreed that CIFSRF-funded research has successfully responded to the needs of national level private sector actors. ⁷⁰ Similarly, 60% of respondents strongly agreed or agreed that the results of their research have been adopted by national level actors. ⁷¹ This is a slight increase as compared with Phase 1. In terms of multinationals (a category of private sector actor not specifically targeted by CIFSRF), less than half of survey respondents (44.5%) felt that results generated by CIFSRF successfully responded to their needs. ⁷² A total of 31.1% of survey respondents agreed that the results of their research have been adopted by multinationals. ⁷³ At the same time, Canadian companies (which are not necessarily multinational) are expected to play a significant role in scaling up impact; interviewees tend to conflate the two, erring on the side of caution. ⁷⁴

3.4 Sustainability

3.4.1 Program Level Support for Scaling Up

Finding 27:

CIFSRF's portfolio approach to selecting and scaling up projects with potential is tactical. Important dimensions of doing so are not being pursued systematically. The program is varyingly over-relying on Project PIs and IDRC staff for strategizing, implementing, training and researching scaling up, which is problematic given inadequate experience, capacity and time.

CIFSRF is supporting a diversity of projects, including a plethora of products, services and policy-related innovations, all in various stages of development. The program's strategy for success assumes that 5-10% of supported projects / solutions will scale up to impact millions of people, that another 20-30% will impact tens of thousands of people, while the remainder will have considerable less impact if at all (see Annex XXXI). Scale up support provided by CIFSRF to project PIs has been adequate but not optimal. CIFSRF-organised training workshops75 have been largely appreciated, and increased opportunities for experience sharing across projects are sought by project PIs.

A few important limitations of CIFSRF's approach to scaling up support are noteworthy. The program is over-relying on Project PIs and IDRC staff for strategizing scaling up, though neither group is ideally suited to the task. IDRC does not have adequate capacity in-house or even staff time to lead and/or support the strategizing, implementing, training and researching of scaling up to a high standard across the board (see Annex XXXI). Key stakeholders are fairly consistent in noting that greater and more specialised technical support for scaling up would be of great benefit to project teams. ⁷⁶ For the time being, there is variability in scale-up capacity and sophistication from one project team to another, with only a handful having the training, experience and networks to pursue scaling up strategically, effectively and efficiently.⁷⁷

3.4.2 Promising Scale Up Strategies

Finding 28:

A diversity of scaling up pathways is being supported and simultaneously researched. It is too early to ascertain the most promising scale-up strategies, though progress is being made for a high proportion of projects in developing the multiple characteristics required for effective scaling up. An important tension remains between scaling up research and researching scaling up that requires attention for both priorities to be undertaken optimally.

CIFSRF's portfolio approach has seen a diversity of scale up pathways being supported and researched simultaneously. At the highest level, three broad scaling up pathways are being pursued: Informing policy; Extension and NGO approach; and Market-based or business model. As of June 2016, 37 scaling up models, approaches and strategies were being developed by CIFSRF projects. The program is thus well on its way towards meeting and surpassing its targeted output of 20-30 scaling up models field tested by end of CIFSRF Phase 2. Fach of these approaches is fairly unique and complex, reflecting the nature of the innovation in question and also the multiplicity of scaling up strategies possible and prioritised for each. It is still early in the Phase 2 trajectory to ascertain the most promising of these scale up strategies, noting that scaling up training has very recently started. An important first step has been in ensuring that projects and solutions have many of the characteristics required for effective scaling up: a good solution, a strong business model, the right partners, receptive contexts and ample opportunities, and leadership in the long run. Based on a sample of 6/18 projects, CIFSRF funded Phase 2 projects have most or all desirable scale up characteristics, as defined by the program (see

Annex XXXII). Beyond this, further research is required to understand the extent, quality and challenges of each pathways and model being pursued.

A tension remains evident within CIFSRF between *scaling up research* and *researching scaling up*. Both are pursued adequately but not optimally, given time, staffing and overall resources constraints. Scaling up research is for now given precedence over researching scaling up, as per the GC's prioritization. The scaling up research methodology is still in early development and also not yet effectively articulated to key stakeholders. Most project PIs do not perceive themselves to be active and engaged participants in researching scaling up, and as yet, have not systematically been brought into what should be a collective research project. Scaling up research is principally undertaken by a small contingent of IDRC staffpersons. Finally, the program's short timelines do not favour a sustainable approach to scaling up, constraining both the scaling up process and learning from experiences with scaling up (see Annex XXXII). In particular, they create significant challenges for sourcing know-how beyond the program and project teams, a point raised by the vast majority stakeholders. The "institutional capacity space", "fiscal/financial space" and "learning space" available for both scaling up research and research scaling up remain inadequate to the objectives at hand. Sa

3.4.3 Integration into Global Affairs Canada Policies and Programs

Program goals are consistent with Canadian international development policies and programs. In Phase 2, there is one example of a result having been integrated into GAC programming, and another with potential for future synergies. Lessons learned from CIFSRF overall are feeding into internal GAC processes. Untapped opportunity exists for GAC and the broader development assistance community to strategically support CIFSRF results that have demonstrated policy influence in DCs.

There continues to be high-level alignment between Canadian international development policies and the CIFSRF, as well as consistent GAC representation (policy and operational) in the design and governance of the Fund, contributing feedback towards policy coherence. Interventions by GAC to move the research-for-development agenda forward to practical, application-ready solutions were key to the scale-up focus of Phase 2 overall. As noted in section 2.3.2, discussions within GAC have drawn on the CIFSRF experience overall. In Phase 2, the evaluation team found evidence of the integration of results into GAC programming for one significant direct GAC spin-off project (namely, \$57 million Livestock Vaccine Innovation Fund⁸⁴ partnership) and one GAC potential for synergy (between Bolivian fisheries projects⁸⁵).

The integration of CIFSRF results into GAC programming is widely perceived as the most significant challenge facing the Fund, with a number of factors impeding the uptake and thus also sustainability of results (see Annex XXXIII): lack of a comprehensive strategy and accompanying resources to engage in an on-going dialogue about CIFSRF results with GAC staff at different levels and in different countries⁸⁶; few dedicated CIFSRF human resources at GAC HQ (estimated at between .15 and 1.5 persons per year); lack of synergy between CIFSRF and GAC country strategies, priorities and timelines; limited human resources, high staff turnover, and lack of incentives to work on CIFSRF within country missions; little opportunity for monitoring of projects by GAC CIFSRF staff; potential lack of coherence between aid, trade and development agendas; and an 'overly optimistic' premise of evidence-based programming.⁸⁷

With research results only available late in Phase 1, it may also be too early to see extensive integration of results, as well as unrealistic to expect that evidence will necessarily have direct impact on policies and programs, especially in a short time frame.⁸⁸ Importantly, all Phase 2 projects sampled for this evaluation have been found to be influencing and/or informing, or on their way towards influencing and/or informing public policies and/or programs related to FS and nutrition in DCs (see Annex XXVI). A

significant opportunity for strategic support by GAC and the broader development community to support the scaling up of this work is clearly in evidence.

3.5 Cross-Cutting Themes

3.5.1 Gender Equality

Finding 30:

Drawing on lessons from Phase 1, newly institutionalized processes for gender equality are not only benefiting CIFSRF but also IDRC's AFS program as a whole. As in Phase 1, projects are contributing to more economic opportunities for women and, more modestly, to increased participation in decision-making.

In Phase 2, IDRC and GAC have been building on lessons learned from Phase 1 to further strengthen the Fund's practices and systems for integrating gender equality, which are now not only benefiting CIFSRF but also IDRC's AFS program as a whole. In their proposals, potential grantees are now required to develop a gender strategy and an indicative budget for its realisation. IDRC has also integrated a new module on gender equality into project inception workshops to ensure greater integration of gender equality from project onset. Nonetheless, an independent gender audit of CIFSRF projects conducted in 2016 by UK-based firm Firetail revealed that project capacities for gender equality remain uneven. ⁸⁹ The evaluation team believes that sustained technical support being provided by the UK firm will likely be effective in strengthening project capacities. ⁹⁰

According to women beneficiaries consulted in FDGs, at least 4 of the 6 projects sampled in Phase 2 increased economic opportunities for women, 91 and at least half contributed to increasing nutritional benefits for women and children. 92 Based on women's testimonies, two of the visited projects contributed to women's participation in decision-making processes beyond the household. Based on interviews with other country-level stakeholders, two other projects have contributed to increasing women's participation in decision-making processes. However, while the evaluation notes that the PMF for Phase 2 better integrates gender equality overall, we also found shortcomings in the way CIFSRF tracks and reports on progress made in improving women's participation in decision-making processes.

Reducing women's drudgery in agriculture is not a Fund objective. However, the Fund is tracking this issue, and 5 solutions being tested are aimed at doing so. This may point to a need for CIFSRF to more coherently plan for its contribution in this area, from project approval through implementation, including monitoring and reporting (see Annex XXXIV).

3.5.2 Environmental Sustainability

Finding 31:

Environmental sustainability considerations have been steadily less prioritised in formal terms over the course of Phase 2. In practice, the program has nonetheless largely supported environmentally sustainable projects, and provided advice to grantees to ensure that environmental sustainability priorities are well understood and adequately pursued.

CIFSRF is subject to the Canadian Environmental Assessment Act and appears to be in line with Canadian policy on environmental sustainability, including GAC's Policy for Environmental Sustainability and the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals. CIFSRF continues to rely on the Strategic Environmental Assessment (SEA) of the Fund dating back to early in Phase 1. The SEA expressed 6 globally recognised considerations and principles for ensuring that the Fund avoided harm and favoured environmental improvement. ⁹³ Environmental sustainability considerations have continued to be integrated into all stages of the program, as per commitments written into the funding agreement between GAC and IDRC. ⁹⁴ During the Proposal stage and throughout

the funding period thus far, IDRC has provided ongoing support and feedback to grantees to ensure that environmental sustainability priorities are well understood and adequately pursued (see Annex XXXV). Reporting on environmental sustainability is a project requirement. In this vein, a high proportion of both Canadian and DC PI survey respondents agreed in strong and roughly equal measure that CIFSRF's environmental sustainability strategy is appropriate.⁹⁵

At the same time, environmental sustainability has been steadily less prioritised over the course of Phase 2. Concept Notes and Proposals submitted for CIFSRF funding have been examined and specifically scored by the SAC through a lens of environmental sustainability, weighted at 12.5% for Call 4 and 5% for Call 5.96 In Call 6, all 3 cross-cutting themes were accorded an aggregated 15% weighting for the first time. As such, it was possible for proposals to score maximum points for this category without speaking directly to issues of environmental sustainability. While this has seemingly had few detrimental implications for the program, the evaluation team has seen evidence that important sustainable livelihood issues (including biosafety, socio-economic, health and safety matters) were not systemically and thoroughly assessed in considering the scaling up of innovations. Overall, 70% of Canadian PIs and 91.3% of DC PIs surveyed agreed or strongly agreed that results generated by CIFSRF-supported research for development are environmentally sustainable. Compared to Phase 1, Canadian PIs are less certain on this point while DC PIs are in greater agreement.

3.5.3 Governance

Finding 32:

Good governance is an important Phase 2 addition to the Fund as a cross-cutting theme. Evidence available to date on the promotion of good governance is limited but encouraging, though consistency appears to be lacking on how project teams understand what it means and might entail for their work. In practice, CIFSRF projects are largely pursued in a participatory or collaborative approach, though with less evidence of 'bottom up approaches' to R4D or widespread community-level empowerment at this stage.

Governance as a cross-cutting issue was first included in proposal guidelines and in the SAC evaluation grid with Call 5 (see Annex XXXVI). A total of 7 Call 5 projects and 8 Call 6 projects are subject to this cross-cutting theme. The vast majority of Canadian and DC stakeholders believe that good governance is being promoted through the Fund. 82.6% of PIs strongly agreed or agreed that CIFSRF pursued an appropriate good governance strategy. However, interview data suggests that project teams are not necessarily clear on what is expected of them in terms of governance. According to preliminary project reports available in June 2016 as well as interview data, PIs are interpreting governance in a multiplicity of ways, such that Fund-wide M&E on this matter will undoubtedly prove challenging. According to one GAC staffperson, "the quality of governance is diverse in all projects. The projects span a range from being very participatory to not all." Relevant interview data also elucidated some of the uncertainty around good governance as an objective – the extent to which it should or could be promoted.

With regard to the promotion of bottom-up approaches to R4D, the evaluation used a public participation spectrum (inform-consult-involve-collaborate-empower) to analyse the 6 sampled projects. All projects indicate Canadian-DC partner *collaboration* in the development of alternatives and solutions. 5 of 6 projects *involve* a host of relevant others, including end users, to ensure their concerns and aspirations are consistently understood and considered. More intense engagement associated with *empowerment* is in evidence in Bolivia, the best example of a project pursuing a bottom-up approach, and to a lesser extent for the Cambodia project, in empowering the partner organization to assume leadership. At the same time, because some projects are predicated on community-based engagement, while others benefit the poor and marginalized groups by reaching a broad cross-section

of beneficiaries, stakeholders and consumers, the relevance of a "bottom-up approach" is inherently different across the portfolio.

3.6 Efficiency

3.6.1 Program Management

Finding 33: Phase 2 of the CIFSRF Program is delivering outputs within its budget and on time. However, implementation of the Call for Proposals process and program monitoring are under resourced. Staff are responding by reallocating resources and continuing to adapt internal processes developed in Phase 1. Finally, GAC needs regarding evidence-based reporting require further discussion.

CIFSRF staff is delivering Phase 2 outputs within its overall timeframe and budget. Similarly to Phase 1, short timelines and budget constraints are leading to considerable stress on staff, despite the addition of a staff member in 2015. All Phase 2 Calls were launched and projects were approved as planned in the Phase 2 Strategic Workplan. To meet deadlines, CIFSRF staff began Phase 2 work prior to signing the Funding Agreement and have relied on non-CIFSRF IDRC staff time. While the CIFSRF project is within budget for Phase 2, staff salary expenditures for the period April 2013 – January 2015 exceeded the budgeted amount by 6%, indicating that similarly to Phase 1, insufficient human resources have been dedicated to the program. CIFSRF stakeholders identified the following key factors as 'causes' for the unanticipated high level of human resources required to meet program requirements and targets: the use of a Call for Proposals mechanism, and high response rate; the extensive accountability/reporting requirements; and the emphasis on partnerships (see section 3.2.1).

Through the integration of learning from Phase 1 and iterative changes between Calls 4, 5 and 6, CIFSRF staff adjusted systems to improve the management of the Call for Proposals process, leading to a progressive increase in the quality of proposals received from CIFSRF's various target audiences. The key concern reported by implementing partners was the time gap between the end of Phase 1 funding and beginning of funding for Phase 2 Calls. Both the Canadian and local partners noted that this gap made it challenging to maintain the projects' momentum and the partnerships cohesive.

CIFSRF partners report that IDRC staff are responsive in providing appropriate support to conduct project level monitoring and evaluation through the online database. However, some note that the guidelines and expectations for individual indicators should be clarified. The frequency and depth of reporting requirements are considered a burden by some implementing partners, notably academics. ¹⁰⁴ Although the online database produces significant project-level reporting, stakeholders both internal and external to CIFSRF note that the current system is not designed to fully capture the impact of CIFSRF.

Strengths and Weaknesses of Program Management

The strengths and weaknesses of CIFSRF, as identified through interviews and the evaluation survey are similar in Phase 2 to those noted in Phase 1 (see also Annex XXXVII). Stakeholders consulted regarding Phase 2 also commented that current demand placed on staff is not sustainable should the program continue into a third phase. Additionally, GAC staff have expressed that M&E systems currently in place, specifically with regards to clear evidence-base reporting, are not fully meeting department needs. ¹⁰⁵

3.6.2 Governance Arrangements

Finding 34:

CIFSRF's governance arrangements have been appropriate to the Fund's overall objectives and have contributed to its effectiveness. The GC and SAC have taken effective measures to address the weaknesses of Phase 1, but what remains to improve the Fund's governance is a yet more diverse and representative GC.

The strengths of the Fund's governance arrangements, particularly the GC and the SAC as discussed in Phase 1, carry over into Phase 2 (see Annex XXXVIII). Important changes aimed at addressing some governance weaknesses raised in Phase 1 have also been made. There is evident improvement in the gender balance of both Committees. The GC is also now able to seek approval from the Minister of International Cooperation on a non-objection basis for the nomination of new members to avoid unnecessary delays. GC membership has been opened up to "other government department" candidates and to Canadian private sector companies to respond to the need for greater diversity. Attempts made to bring in civil society representatives on the GC, however, were not approved by the Minister's Office. It further remains, for Phase 2 as for Phase 1, that in order to be more representative, strategic and inclusive, and to strengthen ownership, the Committees would be better served by the inclusion of experts from the Global South, representatives of beneficiary groups, and Canadian civil society.

3.7 Phase 2 Recommendations

Phase 2 of CIFSRF has built on the successes and lessons of Phase 1.¹⁰⁷ The following recommendations speak to the formative character of the evaluation, intent on informing the program's work for the remainder of Phase 2. A list including 'Operational Implications' for each recommendation is found in Annex XXXIX.

3.7.1 'Scaling Up Research' and 'Researching Scaling Up'

Recommendation 1: CIFSRF should advise and support project teams to strategically and effectively build relationships or partnerships with appropriate Canadian and DC actors, intent on a more effective scale up of innovations. Priority Level: 1

Recommendation 2: CIFSRF should bolster its efforts and methodologies of 'researching scaling up'. Priority Level: 2

Recommendation 3: CIFSRF should strategically address the possible integration of CIFSRF results into GAC programming. Priority Level: 2

Recommendation 4: CIFSRF should clarify its strategy, priorities and approaches with respect to each of the three categories of private sector actors: small-scale actors in DCs; national level in DCs; and multinationals. Priority Level: 2

3.7.2 Support for Learning and Knowledge Spaces

Recommendation 5: CIFSRF should provide support and spaces for cross-project collaboration in documenting and sharing experiences. Priority Level: 1

3.7.3 Awareness and Understanding

Recommendation 6: CIFSRF should implement its communication strategy with a particular focus on target groups that have been reached the least effectively thus far. Priority Level: 2

3.7.4 Relevance for Food Security and Primary Beneficiaries

Recommendation 7: CIFSRF should ensure that project benefits accrue *primarily* to key program beneficiaries, namely the poor, small-scale farmers, and especially women. Priority Level: 1

3.7.5 Environmental Sustainability

Recommendation 8: CIFSRF should ensure that project results are environmentally sustainable, as per *all* criteria defined in the SEA 2010. Priority Level: 2

3.7.6 Good Governance

Recommendation 9: CIFSRF should ensure that greater understanding is acquired across projects on matters of good governance. Priority Level: 2

3.7.7 Efficiency: Program Management

Recommendation 10: CIFSRF should ensure that M&E needs, requirements and processes are equally clear and feasible for all. Priority Level: 1

Recommendation 11: CIFSRF should undertake a summative evaluation of Phase 2, including a metaanalysis of projects that have received *both* Phase 1 and Phase 2 funding, with a particular emphasis on program and project outcomes. Priority Level: 2

4 Future Programming

4.1 Introduction

The evaluation team has been asked to draw on the assessments of Phase 1 and Phase 2 to inform the development of potential future phases for CIFSRF. We have outlined key elements of an approach to the future that builds on the work undertaken thus far, methodologically, programmatically and institutionally.

4.2 Integration of Evaluation Conclusions

The evaluations of Phases 1 and 2 of CIFSRF highlight several major strengths and a few weaknesses in relation to the evaluation criteria. The most prominent of these are conveyed in Exhibit 4.1.

Exhibit 4.1 Strengths and Weaknesses of CIFSRF

Exhibit 4.1 Strengths and weaknesses of CIFSKF	
STRENGTH	WEAKNESS
Effectiveness	
 Unique partnership of IDRC and GAC in designing and governing the Fund, bringing together extensive knowledge and expertise in applied R4D. Significant contributions of IDRC to the Fund's success, as a highly effective and efficient implementation agency. Provision of support for large projects enabling multi-disciplinary and cross-sector partnerships promoting FS in DCs. Mobilization of the extensive knowledge and expertise of Canadians and their counterparts in DCs. The scientific publication record of participating scientists. The emerging diversity of approaches pursued that are informing and influencing policies and programming in DCs. 	 Short project timelines in relation to objectives. Inadequate opportunity for learning, knowledge sharing and networking across projects. Lack of a clear strategy for strengthening relevant organizational capacities.
Relevance	
 The Fund's focus on improving FS for the poor, small-scale farmers, and women in particular. The emphasis on minor or traditional crops, and on biodiversity-based poly-culture employed by smallholder farmers in marginal agricultural areas in DCs. 	 Lack of participation of representatives of key beneficiaries in the Fund's governance structures, in needs assessment and in project development. Unclear contribution of the Fund to highlevel policy debates on agricultural innovation and FS.
Sustainability	
 Fund's portfolio approach for supporting a diversity of innovations and scaling up pathways. Projects that develop and test promising agricultural and FS innovations, engage DC policy makers, and inform DC policies and programs. 	 Inadequate human and financial resources available for both 'scaling up research' and 'researching scaling up'. Lack of integration of CIFSRF results into GAC programming.

4. A strong M&E system that gathers information on project

informing governance, program and project management.

activities and outputs, creating valuable, accessible information,

STRENGTH WEAKNESS Cross-cutting 1. Strong promotion of gender equality and equity, with appropriate 1. Shortcomings in monitoring and and improving programmatic mechanisms. reporting on women's participation in decision-making processes. 2. Integration of environmental sustainability considerations into all stages of the program. 2. Lack of coherence in how 'reducing women's drudgery in agriculture' is 3. The addition of good governance as a cross-cutting theme in addressed. Phase 2. 3. No clear strategy for the integration and pursuit of good governance in projects. **Efficiency** 1. Overall governance arrangements involving the GC, SAC, GAC and 1. Various GAC administrative requirements, which have led to delays in IDRC. project approvals and disbursements. 2. CIFSRF management practices. 2. Onerous aspects of M&E related to 3. The competitive grant scheme developed over time.

4.3 Strategic Recommendations for Future Programming

Based on the Fund's continued relevance, and its main strengths and weaknesses, the evaluation team has outlined a number of strategic recommendations to inform discussions on the future of CIFSRF.

reporting.

3. Inadequately developed components of

M&E related to outcomes and learning.

4.3.1 CIFSRF, Global Affairs and Government of Canada International Assistance Priorities

There is a clear continued need for CIFSRF. Approximately 793 million people are undernourished globally¹⁰⁸. Small-scale peasant agriculture – a key focus of the Fund - provides 70% of total food produced and consumed around the world.¹⁰⁹. Increasing FS by strengthening small-scale agricultural practices and systems is a pressing global need. The United Nations Sustainable Development Goals (SDGs) are the foundation of the global action plan to fulfill the 2030 Agenda for Sustainable Development. CIFSRF contributes directly to 6 of 8 targets for SDG Goal 2¹¹⁰: "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture".¹¹¹ CIFSRF is highly aligned with Canadian international aid and development priorities. Increasing FS is one of Canada's top five themes for its international assistance envelope, highlighted by the Food Security Strategy (FSS). CIFSRF is the flagship program for the 'Research and Development' pillar of the FSS, and contributes to both the 'Food Assistance and Nutrition' and the 'Sustainable Agricultural Development' pillars. The Fund also advances GACs cross-cutting themes on environmental sustainability, good governance and particularly gender.

The Fund has served as a unique source of motivation and support for Canadian universities to rebuild their international agricultural programs and establish partnerships with DC organizations. It is providing invaluable funding and support that has allowed R&D organizations in DCs to engage productively in these partnerships, developing and testing promising new technologies and solutions, and contributing significantly to agricultural and FS policies. Both the relationships developed and the work being supported by CIFSRF are highly valued in DCs. CIFSRF has brought renewed credibility and visibility to

Canada as an actor in international agricultural R4D. Project support has strengthened and expanded DC research teams actively involved in promising FS research and scale up activities. Closing the Fund at the end of Phase 2 could harm the reputation of IDRC, GAC, and Canada overall, as a partner in development. Maintaining the Fund can be expected to continue building on Canada's reputation in important ways.

4.3.2 Design and Implementation of Potential Future Phases

Given the Fund's strengths and weakness as well as success so far, there is much that should be maintained and built upon and relatively little that should be eliminated altogether. The table below provides an at-a-glance perspective on what the evaluation team believes should be maintained and further built into the future of CIFSRF.

Exhibit 4.2 Maintaining and Building CIFSRF

MAINTAIN BUILD

- 1. **Overall priority on FS of the poor**, with special emphasis on gender equity, social inclusion and environmental sustainability.
- Emphasis on minor or traditional crops, and on biodiversity-based poly-culture, employed by smallholder farmers in marginal agricultural areas.
- Dual track of carrying successful and/or promising projects from Phase 2 into a future phase, while also providing funding for new initiatives.
- Strategy of funding large projects that allow multi-disciplinary and cross-sector partnerships to address complex and pressing challenges to FS in DCs.
- Competitive grants scheme, with open Calls and two-component governance arrangements.
- 6. Financing **Canadian-DC partnerships** involving a diversity of R4D actors.
- 7. Encouraging and supporting researchers to **publish results**.
- 8. Strategy for **engaging DC policy makers** in local projects to: ensure the policy relevance of the work underway; gain the buy-in of policy makers; and develop the links essential for informing improved DC policies.
- Continued work with the private sector, notably small-scale and national level actors.
- 10. IDRC as the implementing agency.

- Provide **longer-term funding** to CIFSRF itself, and extend the duration of existing and new projects (e.g. with 1 year for relationship-building/project development, 3 years for research with likelihood of 3 more years).
- Expand opportunities for learning, knowledge sharing and networking across projects: develop a strategy and allocate resources for drawing high-level lessons from the Fund's results, strategies and operations, communicating them more effectively to various stakeholder groups, and contributing to high-level policy debates related to agricultural innovation and FS.
- Simplify the Fund's **administrative procedures** and the PMF, to speed up project approvals and disbursements and reduce the reporting burden on researchers, thereby improving overall efficiency.
- Strengthen governance and management systems with representatives of key beneficiaries in the Fund's governance structures; include their involvement in needs assessment; include into the Fund's criteria and processes for screening and approving proposals.
- Expand **GAC's strategic engagement** in scaling up processes, facilitated by increased human resources and budgetary allocations.
- Increase **flexibility of partnership** modalities, to allow for the selective participation of international partners towards more effective scaling up; thereby drawing in additional expertise, new and promising networks, and the potential for attracting additional resources.
- 7. Support resilience-building agroecological approaches in the context of **climate change** more intentionally.

4.3.3 Increasing the Uptake and Scaling up of Research Results

The **Fund's portfolio approach** is both tactical and proving itself to be effective in favouring the scaling up of research, and should be maintained. It is premised on the Fund's development of **multiple scaling up pathways**. A **comprehensive and coherent approach to 'scaling up research' and 'researching scaling up'** should be developed, with relevant stakeholders empowered to actively participate in both.

Capacity development strategies need to be developed and implemented as well, with a view to the multiple objectives of the Fund. The Fund should put in place mechanisms for ongoing learning and experience-sharing among Fund stakeholders and more broadly, as a part of the training and M&E dimensions of the Fund. To prevent dependencies on CIFSRF, partners should be encouraged to pursue additional human, organizational and financial resources for their work.

Given the potential opportunities identified in Phase 2, GAC should consider further contributing to the scaling up of CIFSRF results in a number of ways. Appropriate levels of financial and human resources support could be made available so the Fund's research and results can be shared and built upon within GAC HQ, within country missions and in global R4D fora. GAC could develop mechanisms and allocate resources to support regional and national DC government policies and programs that are (currently and potentially) informed by CIFSRF results. Other scaling up pathways involving small scale and national level private actors, and public and commercial organizations/institutions should be pursued appropriately.

4.3.4 Improving Social and Gender Equity and Environmental Sustainability

In future phases, the evaluation team proposes a prioritized thematic emphasis on support for resilience-building agroecological projects and innovations in the context of climate change more intentionally, while still maintaining the overall portfolio approach. CIFSRF has a strong record of supporting research on neglected traditional crops and biodiversity-based poly-culture among small-scale farmers. High-level inter-governmental bodies have recently underlined the importance of related agroecological approaches, particularly within the context of climate change. 114

The evaluation team proposes including representatives of key CIFSRF beneficiaries, namely the poor, especially small-scale farmers and women on the SAC. This would be more inclusive of key stakeholders, more reflective of CIFSRF activities as it emphasizes scaling up, and help move the Fund towards a more 'needs/demand' driven approach that is central to innovations systems thinking (World Bank 2012).

The evaluation team proposes that in future phases, the Fund develop a clear framework for **technology assessment in project selection**, favouring the precautionary principle, as part of its commitment to the cross-cutting theme of environmental sustainability. In cases of high-tech projects, counter-expert analysis should be sought. As such, IDRC and GAC could serve as thought leaders and practice leaders in this field – mainstreaming processes and capacity for broader technology assessment into their R4D systems. ¹¹⁵

4.3.5 Final Comments

Overall, CIFSRF has been remarkable in contributing to R4D intent on benefiting the poor, small-scale farmers and women in particular. The evaluation team strongly recommends that the Fund be maintained and further developed. The current evaluation report provides a set of recommendations that could help the Fund further advance its objectives by retaining and building on the elements underpinning its success, while adapting and innovating institutionally, programmatically and strategically.

Annex I. List of Findings

Findings: Phase 1

- Finding 1: During Phase 1, CIFSRF achieved all but 1 of its planned targets for immediate outcomes, auguring well for the longer-term achievement of the intermediate outcomes and strong progress towards the ultimate outcome.
- Finding 2: CIFSRF played a key role in establishing and strengthening Canadian-DC partnerships. Partnership building and strengthening contributed significantly to the Fund making progress on many of its objectives; successful projects were generally based on effective partnerships.
- Finding 3: Canadian expertise was effectively mobilized, with Canadians widely recognised as having contributed significantly to the success of most projects, if in different ways and to varying extents. Canadian researchers and institutions also benefited from their engagement in the partnerships.
- Finding 4: CIFSRF supported an impressive volume of knowledge production, reflected in the large numbers of studies completed, technologies developed or tested, and reports and publications produced.
- Finding 5: The Fund made important contributions to *individuals'* ability to transfer technologies to intended users/beneficiaries, but it is unclear if it contributed to *organizational* capacities in this area.
- Finding 6: Despite achieving or surpassing most of its planned targets in this regard, relatively little progress was made in improving awareness and understanding, most notably among the Canadian public.
- Finding 7: CIFSRF Phase 1 results were broadly relevant to the FS needs of the poor, small-scale farmers and women in DCs, illustrating complementary FS enhancing pathways. However, processes for the identification, initiation and selection of projects comprised little to no representation of certain key beneficiaries. Overall, some shortcomings were in evidence in the structures and mechanisms through which program relevance for poor, small-scale farmers and women was to be ensured.
- Finding 8: Program goals were consistent with Canadian international development policies and programs. Unsurprisingly, there was no evidence that higher-level program alignment translated into direct relevance of CIFSRF research results to Canadian international development policies and programs. Separate from the relevance of CIFSRF results to GAC policies and programs, lessons learned from CIFSRF overall fed into internal GAC discussions regarding policies/programs.
- Finding 9: Private sector engagement was an area of significant learning for CIFSRF. Phase 1 projects proved highly relevant to small-scale private sector actors, and less so to national private sector actors and multinational companies. The program showed significant potential for increased engagement with national level private sector actors.
- Finding 10: Views on the extent of the Fund's contributions to thinking and debates on FS and agricultural innovation vary considerably. Many of those close to the Fund believed it contributed significantly to thinking and debates on FS and agricultural innovation, while others not directly involved with CIFSRF perceived fewer contributions.

- Finding 11: The provision of Phase 2 scaling up funding and support encourages but does not ensure the continuation, expansion and sustainability of benefits and results beyond Phase 1. It did however enable Canadian-DC partnerships to persist, a much-valued benefit of the program. Without Phase 2 support, some valuable Phase 1 results and benefits from most remaining projects were likely but not certain to persist.
- Finding 12: CIFSRF partners were effective in securing additional human and some financial resources for their projects during Phase 1, only partially achieving targets for complementary funding. Such complementary human and financial resources are important in preventing partner and/or project dependency on CIFSRF.
- Finding 13: Adopted early on, CIFSRF's gender strategy was catalytic in building awareness around gender equality among project teams, though some concerns remained at the end of Phase 1. Most projects contributed to increasing access to resources and nutritional benefits for women and their families while some contributed to increased decision-making among women.
- Finding 14: CIFSRF's environmental strategy was designed to ensure that funded projects were consistent with Canadian policy on environmental sustainability. CIFSRF projects were reported to have had no significant negative environmental impacts over the course of Phase 1, delivering some valuable environmental benefits and services in DCs.
- Finding 15: Phase 1 of CIFSRF was delivered efficiently, within its overall timeframe and budget. However, both the implementation of the Call for Proposals process and M&E were underresourced. Staff responded by reallocating resources, adapting internal processes and working overtime.
- Finding 16: CIFSRF's governance arrangements were suitable and generally worked well. However, they lacked an appropriate diversity of participants and expertise, given the mandate of the Fund.

Findings: Phase 2

- Finding 17: CIFSRF has been effective in favouring the continued and increased use of FS-related Canadian expertise and knowledge, notably through support of Canadian-DC partnerships. An ongoing challenge has been the limited time available to developing new partnerships with both Canadian and DC actors. Overall, most stakeholders recognise the valuable if diverse and changing contributions of Canadians and Canadian expertise.
- Finding 18: CIFSRF partners widely report a strengthening of their organizational capabilities to variably undertake research and test solutions, pursue project management, and take important steps towards taking their research to scale. They report lesser enhancement of their abilities to strategically communicate and share their work with wider audiences or participate in policy processes.
- Finding 19: The Fund seems to be on track to achieve its outcome targets in this area. But it is not clear if this will lead to strengthened capacities of participating organizations to carry out future extension-related activities.
- Finding 20: CIFSRF's Phase 2 emphasis on scaling up is an appropriate continuation of the research-based approach of Phase 1 as it strikes a good balance between consolidating and scaling up the best of Phase 1 innovations and identifying new high-potential innovations for scaling up.

- Finding 21: The Fund's knowledge production has moved beyond the development of environmentally sustainable and gender-sensitive research applications to include research on the more challenging area of scaling research results.
- Finding 22: CIFSRF's Phase 2 communication strategy is integrating lessons learned from Phase 1. Indicators and targets were augmented and slightly modified. Greater emphasis was also placed on communicating impact, creating complementarities between project and program-level communication, and offering communication support to projects. Still, CIFSRF's effectiveness in improving awareness and understanding remains to be seen.
- Finding 23: CIFSRF Phase 2 is on track to meet its targets with regards to the use of research results to contribute to more informed public policies and programming related to FS and nutrition in DCs.
- Finding 24: The Fund's ultimate outcome is a laudable aspiration. However, improving the FS of the *most* food insecure may be an overly ambitious target.
- Finding 25: CIFSRF Phase 2 expected results are broadly relevant to the FS needs of the poor in DCs, focusing on key food security themes (availability, accessibility and use) and illustrating a variety of scaling up approaches. However, processes for the identification, initiation and selection of projects comprise little to no participation of key beneficiaries, namely the poor, small-scale farmers, and women. As scale up takes places, prioritizing FS requires renewed emphasis.
- Finding 26: With stronger emphasis on private sector engagement in Phase 2, the Fund has increased the role of small-scale, and to a lesser extent, DC national level private sector actors.

 Despite increased engagement with multinationals, relevance of this sector to CIFSRF in building FS for the poor remains low.
- Finding 27: CIFSRF's portfolio approach to selecting and scaling up projects with potential is tactical. Important dimensions of doing so are not being pursued systematically. The program is varyingly over-relying on Project PIs and IDRC staff for strategizing, implementing, training and researching scaling up, which is problematic given inadequate experience, capacity and time.
- Finding 28: A diversity of scaling up pathways is being supported and simultaneously researched. It is too early to ascertain the most promising scale-up strategies, though progress is being made for a high proportion of projects in developing the multiple characteristics required for effective scaling up. An important tension remains between scaling up research and researching scaling up that requires attention for both priorities to be undertaken optimally.
- Finding 29: Program goals are consistent with Canadian international development policies and programs. In Phase 2, there is one example of a result having been integrated into GAC programming, and another with potential for future synergies. Lessons learned from CIFSRF overall are feeding into internal GAC processes. Untapped opportunity exists for GAC and the broader development assistance community to strategically support CIFSRF results that have demonstrated policy influence in DCs.
- Finding 30: Drawing on lessons from Phase 1, newly institutionalized processes for gender equality are not only benefiting CIFSRF but also IDRC's AFS program as a whole. As in Phase 1, projects are contributing to more economic opportunities for women and, more modestly, to increased participation in decision-making.

- Finding 31: Environmental sustainability considerations have been steadily less prioritised in formal terms over the course of Phase 2. In practice, the program has nonetheless largely supported environmentally sustainable projects, and provided advice to grantees to ensure that environmental sustainability priorities are well understood and adequately pursued.
- Finding 32: Good governance is an important Phase 2 addition to the Fund as a cross-cutting theme. Evidence available to date on the promotion of good governance is limited but encouraging, though consistency appears to be lacking on how project teams understand what it means and might entail for their work. In practice, CIFSRF projects are largely pursued in a participatory or collaborative approach, though with less evidence of 'bottom up approaches' to R4D or widespread community-level empowerment at this stage.
- Finding 33: Phase 2 of the CIFSRF Program is delivering outputs within its budget and on time. However, implementation of the Call for Proposals process and program monitoring are under resourced. Staff are responding by reallocating resources and continuing to adapt internal processes developed in Phase 1. Finally, GAC needs regarding evidence-based reporting require further discussion.
- Finding 34: CIFSRF's governance arrangements have been appropriate to the Fund's overall objectives and have contributed to its effectiveness. The GC and SAC have taken effective measures to address the weaknesses of Phase 1, but what remains to improve the Fund's governance is a yet more diverse and representative GC.

Annex II. Endnotes

¹ Global Affairs Canada. (2015). *Increasing Food Security*. [online] Available at: http://www.international.gc.ca/development-developpement/priorities-priorites/ifs-asa.aspx?lang=eng [Accessed on June 14th, 2016].

² IDRC. (2015) Request for Proposal 15160036: Evaluation of the Canadian International Security Research Fund, Summative assessment of Phase 1 and Formative assessment of Phase 2, p.9

³ CIDA. (2009). Funding Agreement Canadian International Food Security Research Fund (CIFSRF) Phase1, p. 6.

⁴ CIDA, Funding Agreement CIFSRF Phase1, p.6.

⁵ The Fund complemented the support provided by other major donors and the work of the Consultative Group on International Agricultural Research (CGIAR), which was concentrated on major staple foods. The Fund supported work on marginal or traditional crops often produced by poor farmers in marginal areas, and it emphasized gender equality and environmental sustainability.

⁶ Experiences with other "innovation funds" are reviewed by Ernstberger, J. and Rajalahti, R. (2012) and the references provided therein. See also, the approach for facilitating innovation used by the Platform for African European Partnership on Agricultural Research for Development (PAEPARD). (2016). Policy Brief No. 2. [online] Available at: http://paepard.org/osiris/files/fichier-ressource-policy2en.pdf [Accessed June 13th, 2016].

⁷ IDRC, Request for Proposal 15160036.

⁸CIDA, Funding Agreement CIFSRF Phase1, p.6.

⁹ This is an important departure from approaches adopted by GAC and IDRC together in recent years.

¹⁰ For instance, "100% of the partners developed new skills from the partnerships; 100% of the partners gained research skills...;" IDRC. (2015). 'Annex A: Progress Toward the CIFSRF Performance Measurement Framework,' in CIFSRF Final Narrative Report – Phase 1, p.25.

¹¹ Of note, Canadian PIs tend to recognise and appreciate the Canadian contribution in expertise more vociferously that DC PIs.

¹² For example, in terms of contextual analysis, working in the developing world and with DC partners. Doing so has heightened and further developed the Canadian expertise and capacity for partnership-based R4D into the future.

¹³ IDRC's AFS program maintains an inventory of CIFSRF knowledge outputs, including publications.

¹⁴ "Two gender/communications workshops were organized in South Africa in Nov. 2013 and in India in Feb. 2014. A large number of gender-related outcome stories were produced (see Annex N of *CIFSRF Final Narrative Report – Phase 1*). Gender-related findings were also refined and synthetized at a gender write-shop near the end of CIFSRF projects in early May 2014 following the Dialogue on International Food Security at the University of Alberta, in Edmonton, Canada. A key output of this write-shop is a set of papers that have been submitted in an edited volume *Gender and Food Security in the Global South* (Earthscan 2015)." – IDRC. (2015). *CIFSRF Final Narrative Report – Phase 1*, p.42.

¹⁵ A single output is associated with this outcome: "knowledge and tools transferred to smallholder farmers, especially women." And there are 3 indicators for this output: number and quality of knowledge-transfer tools developed and events held; number of participants attending local knowledge transfer events; and number of partner organizations that have developed a plan or strategy for informing at least one type of CIFSRF audience (Final Narrative Report, Annex A, page 43).

¹⁶ This would require methodologies and fieldwork that are beyond the scope of the present evaluation.

¹⁷ Of the seven output targets, four did not provide specific objectives, making the standard to define achievement easy to meet, e.g. "410.1 Each project has produced and disseminated to the general public its results by the end of the project cycle."

¹⁸ The mid-term evaluation also drew attention to this matter: "To address further opportunities for improvement and added value, reviews of all Call 2 and 3 projects are suggested with respect to: strengthening engagement with local stakeholders..."; "Review concept note and proposal assessment procedures, including the criteria and weighting to address current challenges (e.g, local demand assessment, ...)." Natural Resources Institute. (2012). Report for the Mid-term Evaluation of the Canadian International Food Security Research Fund. Kent, UK: University of Greenwich, page 2.

¹⁹ As outlined by Carol H. Weiss in the Forward to Fred Carden's book, *Knowledge to Policy: Making the most of development research*. (Ottawa: IDRC, 2009; co-published with Sage Publications), studies carried out since the 1970s on the use of research results show that "use" is a slippery concept. "Research is only one input into the complexities of policy making," and it is seldom the dominant influence. Policymakers are seldom waiting for research results (evidence) that would settle an issue. More often, they have a lot of experience of their own on the issue. They usually have many other sources of information and advice, and they may have concerns that the research did not address. For these reasons, individual research projects seldom have direct and immediate effects on decisions concerning policies and programs. However, over time, they may have important consequences as "research percolates into policy making" (page xii). For these reasons, "evidence-based policy" is more an aspiration than a reality. In most situations, the best research can do is to "inform" policymaking and programming, as knowledge gleaned from research seeps into the ideas of policymakers over time. The August 2015 Institute of Development Studies publication "Strengthening Evidence-Based Policy' similarly challenges the "plug and play' view of evidence-based policy", page 2.

²⁰ GAC staff have proposed internally that the CIFSRF model be used for other development innovation funding such as the Development Innovation Fund renewal. Key elements are: "[C]lose relationship and monitoring – almost hand holding – of researchers to make sure focus remains on development question or questions, and coaching them through how to actually design, baseline, and monitor implementation of development questions around things like gender." GAC Senior Staffperson

²¹ Results at output level reported by CIFSRF (output 4.1.2.2) show that 20 out of 21 projects had interactions with private sector, namely, 18 in DCs, 8 in Canada and 7 internationally. There were 196 presentations in DCs that included private sector audiences, 67 in Canada and 42 internationally (though these results are lower than for the development community). There were 292 research outputs that included the private sector as an intended audience.

²² More specifically, small-scale private sector actors pertain to farmers' groups, SMEs, cooperatives, farmers' associations, or individual entrepreneurs; national level private sector actors – companies or individual entrepreneurs who operate at a larger scale of operation, over a more extensive market, and are involved in some part of the value chain; and multinational private sector actors, including but not restricted to those originating in Canada. Although the third category was never specifically targeted by CIFSRF, this breakdown is an aid in the analysis of interview and other data. It also has important analytic, strategic and programmatic implications. Additionally, survey data is insightful on the perspective of PIs for engaging the private sector: Survey data shows 64.5% agreement that results of project research were adopted by the small-scale private sector (with 22.2% not able to judge, 13.3% disagreeing and none strongly disagreeing); Survey data indicates 53.3% agreement that results of project research were adopted by national level private sector actors (with 31.1% not able to judge, 13.3% disagreeing and 2.2% strongly disagreeing); Survey data shows only 22.3% agreement that results of project research were adopted by this category of actors, with 51.1% not able to judge, 24.4% disagreeing and 2.2% strongly disagreeing. Five respondents who referred to the potential engagement of multinationals, expressed concerns over the profit motive of multinationals and what their agenda might be in expanding operations in the service of the FS needs of poor and marginalized people in DCs. A few respondents, referring more specifically to Canadian companies, feel that Phase 1 has not yet been able to make the business case for attracting them, whether such engagement is desirable or not.

²³ See also Section 2.2.6 on awareness and understanding.

²⁴ According to Meinzen-Dick et.al. (2007, pp.4-5), three factor affected technology adoption: vulnerability, assets, institutions. Available CIFSRF data suggests but is not as yet conclusive on the point that its diverse results and benefits variably respond to these factors.

- ²⁵ Additional funding sources directly and indirectly included universities in Canada and developing countries, national research funds, government institutions, foundations, the private sector and international organizations.
- ²⁶ IDRC, Annex A in CIFSRF Final Narrative Report Phase 1, pp.30-31.
- ²⁷ Weaknesses included limited capacity among project teams for conducting gender equality analyses and for integrating gender equality considerations into monitoring and reporting processes. Moreover, projects did not allocate funds for gender analyses and gender-related activities and many of them did not have the required gender expertise to adequately integrate gender equality into projects. Moreover, project teams felt that there were some missed opportunities for sharing experiences around gender equality.
- ²⁸ The objectives of the 2012 Gender Strategy were to: 1) increase project-level capacity for integrating gender equality; 2) facilitate co-learning and sharing among research teams around gender equality 3) document and disseminate gender outcomes from CIFSRF projects. CIFSRF. (2012) *Strengthening the Programming and Delivery of Gender Equity Outcomes in CIFSRF Projects*.
- ²⁹ Gender-blind at the outset, the vaccine project in Kenya is a notable example of how the team was able to integrate gender equality into several project activities and results.
- ³⁰ In Phase 1, 61% of researchers were men and 39% were women.
- ³¹ The PMF does not track how projects and innovations contributed to women making decisions that are not linked to personal income. Some projects reported, especially through outcome stories, how women were increasingly making decisions on the use of productive assets and land management but this was not done systematically.
- ³² IDRC reported in its PMF that 13 projects and 45 innovations were aimed at reducing women's drudgery in agriculture. However, Annex A in *CIFSRF Final Narrative Report Phase 1* and the outcome stories provided qualitative data of CIFSRF's contribution to reducing women's drudgery for two projects only. Moreover, the Evaluation Team did not find evidence of CIFSRF's contribution to reducing women's workload in agriculture in any of the Phase 1 projects visited.
- ³³ These are: sustainable land management; integrated water resources management; protection and enhancement of biodiversity; adaptation to and mitigation of climate change; gender equality; and sustainable livelihoods. CIFSRF. (2010). *Strategic Environmental Assessment*, p.15.
- ³⁴ IDRC, CIFSRF Final Narrative Report Phase 1, pp.72-76.
- "Environmental sustainability was also integrated throughout CIFSRF supported projects via a 'sustainable intensification' framework. In line with DFATD's environment policy and IDRC's policies and practices, CIFSRF explicitly and systematically integrated environmental considerations at all stages of the program. Grantees were required to demonstrate that they have considered the potential environmental harm and opportunities (including the long-term environmental effects) associated with their activities and the resultant technologies or innovations. Projects were also required to present strategies for enhancing the potential positive environmental effects, and mitigating potential negative effects associated with the proposed projects. All CIFSRF projects developed at least one innovation (technology, methodology, or practice) that aimed to contribute to environmental sustainability (59% of technologies in total)." IDRC, CIFSRF Final Narrative Report Phase 1, p.8.
- ³⁶ CIFSRF. (2010). Manual for the Assessment of Proposals and Concept Notes, Instructions for Scientific Advisory Committee Members, p.3. Additionally, the evaluation team was told that where EA's were not required, the SAC nonetheless examined projects carefully to ensure that there were no, potential cumulative negative impact from projects.
- ³⁷ A few projects had special environmental sustainability clauses inserted into their grant agreements and were monitored closely on these matters by CIFSRF POs. IDRC, CIFSRF Final Narrative Report Phase 1, p.40.
- ³⁸ Women respondents expressed noticeably stronger agreement than men on this matter.
- ³⁹ IDRC, Annex A in *CIFSRF Final Narrative Report Phase 1*, p.68. According to the *CIFSRF Final Narrative Report Phase 1*, p.8, "All CIFSRF projects developed at least one innovation (technology, methodology, or practice) that aimed to contribute to environmental sustainability (59% of technologies in total)." (emphasis in original).
- ⁴⁰ IDRC, Annex A in CIFSRF Final Narrative Report Phase 1, p.37.

- ⁴¹ An environmental assessment was triggered for project 106928 "Nutrition from aquaculture and home gardens in Cambodia". This was due to the fish ponds, i.e. the physical works that were constructed in project communities. Project partners and beneficiaries in Cambodia report having drawn valuable lessons from this assessment, in ways that are informing their work internationally.
- ⁴² Two projects that required extensions were the Pulse Crop Production in Ethiopia and Aquaculture in Sri Lanka.
- ⁴³ See Annex XVIII for an analysis of the IDRC staff time spent on CIFSRF.
- ⁴⁴ For example, there was an increase in the diversity of applications in terms of geography and types of organizations from Call 2 to Call 3, as the CIFSRF team adjusted the targets and the language in the Calls.
- ⁴⁵ Technical reporting is annual and financial reporting is bi-annual. Academic partners were more likely to express the burdensome nature of reporting than development-oriented organizations. This is understandable given that academic grants (e.g. SSHRC) generally entail significantly less reporting than CIFSRF or other similar development funding.
- ⁴⁶ Several respondents highlighted the onus of GAC reporting requirements. Frustration was further noted amongst research partners who experienced delays in being able to announce their project award, owing to the further approval of projects already endorsed by the GC that had to come from the Minister of International Cooperation.
- ⁴⁷ Of note, with frequent changes in the role of secretary of the GC, the need for better administrative follow-up and continuity was noted.
- ⁴⁸ CIDA. (2013). Funding Agreement Canadian International Food Security Research Fund (CIFSRF) Phase2.
- ⁴⁹ CIDA, Funding Agreement CIFSRF Phase2, Appendix A, p.15 of 53.
- ⁵⁰ IDRC. (n.d.) CIFSRF Phase 2 Third Annual Narrative Report (April 1, 2015 to March 31, 2016), p.6.
- ⁵¹ In Phase 1, there were 12 Canadian and 25 DC organizations funded through CIFSRF.
- ⁵² IDRC. (n.d.) CIFSRF Phase 2 Second Annual Narrative Report (April 1, 2014 to March 31, 2015), p.14.
- ⁵³ University of Victoria brought in as a new partner on the Bolivia project, for its micro-credit experience. UBC Sauder School of Business brought into the Cambodia project, to provide training based on its marketing expertise.
- ⁵⁴ More generally, CIFSRF funding is recognised as having raised the ability of certain DC partners to achieve impacts at scale, by virtue of its investments into expanding their research and human resource capacities.
- ⁵⁵ Most PIs note that their organizations were not effectively supported in ways that developed their capacities to influence policy, save for individuals having acquired skills in writing more effective policy briefs.
- ⁵⁶ See Summative Evaluation, Phase 1.
- ⁵⁷ This reflects a wider learning from the CIFSRF team on the selection of projects likely to be successful in applied research.
- ⁵⁸ By way of example, the scaling up dimensions of the 'Scaling up homestead food production in Cambodia' project are well underway at national level, effectively drawing in multi-sectoral actors. In contrast, the Kenyan CBPP scale up pathways are still being developed, with immense potential to impact the practices, nutrition and broader food security of millions of people, including small-scale farmers, women and young people across Africa. Given this diversity, current progress is appropriate on Intermediate Outcome 2, Indicators 2.1 and 2.2.
- ⁵⁹ In Phase 1, one of the key indicators of knowledge generation was "number of publications." In Phase 2, this indicator has been retained in the PMF, but has migrated to the area of "improved awareness and understanding among policy makers, private sector, the development assistance community and the public."
- ⁶⁰ For example, high level communication, website links, invitations by CIFSRF projects to field offices of Government of Canada structures.
- ⁶¹ See discussions on agricultural innovation in Hall (2009), Ekboir (2003) and World Bank (2012).
- ⁶² Quantitatively assessed by CIFSRF as measurable yield, income, nutrition increases.
- ⁶³ For example, double-cropping with legumes and associated nutrition outreach work in Ethiopia leading to increased availability of protein-rich food for poor small-scale farmers and women.

- ⁶⁴ For example, interviewees noted that mechanized millet dehulling in India risks negatively altering the value chain by transferring control of the sale of millet from women to men (see Annex XXXIV)
- ⁶⁵ The mid-term evaluation also drew attention to this matter. "To address further opportunities for improvement and added value, reviews of all Call 2 and 3 projects are suggested with respect to: strengthening engagement with local stakeholders..."; "Review concept note and proposal assessment procedures, including the criteria and weighting to address current challenges (e.g. ..., local demand assessment,) Natural Resources Institute. (2012). Report for the Mid-term Evaluation of the Canadian International Food Security Research Fund. Kent, UK: University of Greenwich, p.2.
- ⁶⁶ See IDRC, CIFSRF Phase 2 Second Annual Narrative Report, p. 31. Empirical data shows that they have engaged in collective work, economies of scale, and bulk sales, for example.
- ⁶⁷ With 20% not able to judge, 2.2% disagreeing and 2.2% strongly disagreeing.
- ⁶⁸ With 15.6% not able to judge, 17.8% disagreeing and none strongly disagreeing.
- ⁶⁹ They can be situated in diverse locations along the value chain for a product or crop being promoted, scaling up the market and generating demand for products, providing services that build capacity of small-scale farmers, and having the potential to purchase licenses for the technologies.
- ⁷⁰ With 24.4% not able to judge, 6.7% disagreeing and no one strongly disagreeing.
- ⁷¹ With 22.2% not able to judge, 17.8% disagreeing, and no one strongly disagreeing.
- ⁷² 40% were not able to judge, 15.6% disagreed and none strongly disagreed.
- ⁷³ With 37.8% not able to judge, 31.1% disagreeing and none strongly disagreeing. Of note, the proportion of respondents that strongly agreed or agreed is higher than for Phase 1.
- ⁷⁴ For instance, one respondent mentioned the link to a Canadian company for potato cultivars in Colombia, noting that the relationship raises the risk that their large-scale production process may adversely affect production systems of small farmers. There are currently five Canadian companies as third party organizations, mostly in the field of biotechnology, and one research partner. Overall, Phase 2 saw an increased in Canadian companies as applicants from Call 4 through to Call 6.
- ⁷⁵ For example, 'Scaling Up Workshop: Fine-tuning scaling up strategies' delivered in Cambodia in March 2016.
- ⁷⁶ For successful scale up, "[i]nstitutional, organizational, and staff capacity must be created." See Johannes, L.F. (2012). 'Overview: Pathways, Drivers, and Spaces' in *Scaling Up in Agriculture, Rural Development, and Nutrition*, Focus 19, Brief 1.
- ⁷⁷ This has particularly been the case where research and development organizations have been working together and where the teams have effectively tapped into the experience of third party organizations and wider networks (e.g. Cambodia homestead food production). As noted by one SAC member, "[f]or example, in Call 6, there was some very good work on new varieties of beans and Nitrogen fixing. The people involved had no idea how to scale up. So they brought in a new partner. This was Farm Radio International, a Canadian with experience in East Africa. They all gelled naturally and this is going quite well."
- ⁷⁸ IDRC, CIFSRF Phase 2 Third Annual Narrative Report, p.31.
- ⁷⁹ IDRC, Annex A in CIFSRF Phase 2 Second Annual Narrative Report, p.31.
- ⁸⁰ IDRC, Annex H in Draft CIFSRF Phase 2 Third Annual Narrative Report.
- ⁸¹ The first was delivered in October 2015 and the last is planned for September 2016. See, for instance, 'Scaling Up Food Security Innovations in Asia', a presentation by IDRC on 29-31 March 2016, Phnom Phen, Cambodia.
- ⁸² See Minutes of the Governance Committee Meeting on 15 March 2012; The matter of scaling up research was discussed earlier in the report. Issues around researching scaling up will make up the bulk of the remaining space related to this finding.
- ⁸³ On the matter of drivers and effective spaces for scaling up, see Johannes, L.F. (2012) 'Overview: Pathways, Drivers, and Spaces' in *Scaling Up in Agriculture, Rural Development, and Nutrition*, Focus 19, Brief 1. See also the multiple articles within this publication.

- ⁸⁴ Announced in February 2016, the Livestock Vaccine Innovation Fund is a direct spin-off from the CIFSRF vaccine projects in Africa. This is a partnership between the Bill & Melinda Gates Foundation, GAC, and IDRC, representing a joint investment of CAD 57 million over five years to support the development, production, and commercialization of innovative vaccines against priority livestock diseases in sub-Saharan Africa, South and South East Asia.
- ⁸⁵ The Bolivian CIFSRF fisheries/aquaculture project was mentioned as having the potential to influence/develop synergies with a future possible \$1 million GAC bilateral on fisheries in Southern Bolivia.
- ⁸⁶ This gap was also noted during the mid-term evaluation of Phase 1. "The future Governance Committee meetings should increase its focus on aspects of program strategy that will enable the best possible returns from this investment, including: (...) Potential mechanisms for using emerging research results to inform CIDA programming." Natural Resources Institute, Report for the Mid-term Evaluation, p.23.
- ⁸⁷ See Endnote 19.
- 88 ibid.
- ⁸⁹ Results from the gender audit suggests that 6 projects are giving strong attention to gender; 5 projects are giving moderate or weak attention to gender; and 4 projects are giving no or cursory attention to gender.
- ⁹⁰ Firetail is developing capacity building tools tailored to the projects' needs and conducting a series of gender workshops in mid-2016. Follow-up support will be provided to project teams through periodic online webinars. The same scorecard used to conduct gender audits in 2016 will be used to reassess project capacities at a later date. By way of comparison with support provided to project teams during Phase 1 (mostly through standalone workshops), the evaluation team believes that sustained technical support in Phase 2 will likely be more effective in strengthening project capacities for gender equality.
- ⁹¹ For example, the Evaluation Team found evidence of increased fish yields benefiting women in some projects, and more income for women franchisees and shop assistants in another. It is also expected that healthier cows will produce more milk resulting in substantial income increase among women farmers in yet another.
- ⁹² In Bolivia and Cambodia, increased fish protein consumption and better knowledge of hygiene and sanitation practices are having positive benefits on the nutritional status of women and children. Increased nutritional benefits for women and children from consuming pulse are also reported in Ethiopia.
- ⁹³ These are: sustainable land management; integrated water resources management; protection and enhancement of biodiversity; adaptation to and mitigation of climate change; gender equality; and sustainable livelihoods. CIFSRF, *Strategic Environmental Assessment*, p.15.
- ⁹⁴ IDRC, CIFSRF Phase 2 Third Annual Narrative Report, p.26.
- ⁹⁵ Women respondents expressed noticeably stronger agreement than men on this matter.
- ⁹⁶ CIFSRF. (2010). Manual for the Assessment of Proposals and Concept Notes, Instructions for Scientific Advisory Committee Members, p.3. Additionally, the evaluation team was told that where EA's were not required, the SAC nonetheless examined projects carefully to ensure that there were no, potential cumulative negative impact from projects.
- ⁹⁷ The Call 5 evaluation grid assigns 5% points to the governance issue. It stipulates: a) the applicants demonstrate an understanding of the barriers to good governance as they relate to food security; and b) the proposal identifies opportunities for the research project to promote (and address) the principles of good governance, such as participation and inclusion, transparency and accountability, equity and non-discrimination, capacity and responsiveness of project partners to the needs and priorities of clients and beneficiaries. In the Call 6 evaluation grid, all 3 cross-cutting themes were accorded an *aggregated* 15% weighting for the first time. As such, it was possible for proposals to score maximum points for this category without speaking directly to issues of governance.
- ⁹⁸ Of the 43 respondents in the survey, 16.3% were not able to judge if CIFSRF has an appropriate good governance strategy and only 4.7% disagreed. More data are available in Annex XXXVI.
- ⁹⁹ Project data suggests that "transparency and accountability" is mostly interpreted in reference to the institutional arrangements of projects but not the systems and behaviours of government counterparts, for

example, in their relationship to citizens. "Inclusion" is more clearly understood with regards to gender equity but not broadly understood in relation to the poorest or to hard-to-reach populations. Finally, "equity" and "non-discrimination" would require a closer examination and analysis of different social and economic categories, which are not revealed in the data.

- ¹⁰⁰ See Technical Reports for projects #107982 (Cambodia), #107985 (Bolivia), and #108124 (Vietnam).
- ¹⁰¹ See Sheedy, A. (2008). *Handbook of Citizen Engagement: Beyond Consultation*. Canadian Policy Research Networks, p.54.
- ¹⁰² The exception being the Kenya vaccine project that is working with scientists in the lab Nonetheless, livestock farmers are brought in when scientists need to solicit their thoughts.
- ¹⁰³ For example, the under-allocation of funds for Call 4 resulted in IDRC going through an additional Call, Call 6. Although having an additional Call led to a greater use of internal resources, which is less efficient, it allowed CIFSRF to test a new, more business-oriented approach, which increased the proportion of proposals from the private sector.
- ¹⁰⁴ As noted in Phase 1, academic partners were more likely to express the burdensome nature of reporting than development-oriented organizations. This is understandable given that academic grants (e.g. SSHRC) generally entail significantly less reporting than CIFSRF or other similar development funding.
- ¹⁰⁵ GAC staff have also expressed frustration with the lack of access to the CIFSRF database. However, granting beyond-IDRC access is challenging as the CIFSRF database is part of the broader IDRC AFS program management system.
- ¹⁰⁶ Other delays did occur in 2015-2016 affecting Call 6 projects. Due in part to the change in Government in Canada and ministerial approval required for grant agreements, there was a one-month delay in contacting successful Call 6 projects and a more significant delay in the public announcement of the projects awarded because Ministerial approval was required for this as well. See pp. 11-12 and p. 36 in the Third Annual Report of CIFSRF Phase 2.
- ¹⁰⁷ The following quotes capture the overall findings of the Phase 2 evaluation: "The work that Farmshop is doing is in the right direction and the timing couldn't be better. We at the government office are very impressed with their work. It is a tall order but they seem to be handling it very well." DC partner; "There was a huge and positive response at the grassroots level, with nutrition education and benefits aimed at pregnant and lactating women and children under 5 years." DC partner
- ¹⁰⁸ FAO (2016). The State of Food Insecurity in the World 2015: Key messages. [online] Available at: http://www.fao.org/hunger/key-messages/en/ [Accessed June 9th, 2016].
- ¹⁰⁹ It is a major (and often only) source of food for the most food insecure. ETC Group. (2014) *With Climate Chaos, Who Will Feed Us? The Industrial Food Chain or The Peasant Food Web?* [online] Available at: http://www.etcgroup.org/sites/www.etcgroup.org/files/web who will feed us with notes 0.pdf [Accessed June 9th, 2016].
- ¹¹⁰ The two other goals are connected to global governance systems and thus not directly relevant to R4D.
- ¹¹¹ United Nations. (2016). Sustainable Development Knowledge Platform. [online] Available at: https://sustainabledevelopment.un.org/sdg2 [Accessed June 13th, 2016].
- ¹¹² Adjustments in its trajectory during the remaining years of Phase 2, as recommended in the Phase 2 report, will also ensure that the Fund is well situated institutionally and programmatically to move forward towards its objectives more effectively, efficiently and sustainably.
- ¹¹³ Though the program still does not have clarity on the relative merits and effectiveness of particular pathways.
- ¹¹⁴ Millennium Ecosystem Assessment; FAO International Symposium on Agroecology for Food Security and Nutrition; FAO/UNEP Sustainable Food Systems Program; UN International Year of the Soils; International assessment of agricultural knowledge, science and technology for development (IAASTD). 2009. Agriculture at a Crossroads: a synthesis of the global and sub-global IAASTD reports; IPES-Food. 2016. From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems. International Panel of Experts on Sustainable Food Systems. Also, a new report from the International Panel of Experts on Sustainable Food Systems.

makes a specific recommendation to "[m]ainstream agroecology (...) into (...) research agendas". Strengthening the Fund's emphasis on agroecological intensification and diversification in the context of climate change, within the broader portfolio approach, would increase potential for direct benefits for intended beneficiaries, as well as more resilient food systems and livelihoods, with fewer risks and unintended side effects. This would also serve to strengthen and clarify the CIFSRF niche internationally, making a strong Canadian contribution to promising, globally important and under-served areas of research for development.

Technology assessments could cover social (including gender), cultural, environmental and economic factors, with an emphasis on FS, and in this case could highlight the perspectives of intended beneficiaries. For a review of recent technology assessment approaches for development, see: *Ely, A.; van Zwanenberg, P.; Stirling, A.C.,* 2011: New Models of Technology Assessment for Development. STEPS Working Paper 45. Brighton, STEPS Centre, available at http://steps-centre.org/wp-content/uploads/Technology Assessment.pdf. [Accessed June 12th, 2016]. An article by the same authors building on the report can be found at: *Ely, A.; van Zwanenberg, P.; Stirling, A.C.,* 2014: Broadening Out and Opening up Technology Assessment: Approaches to Enhance International Development, Co-ordination and Democratisation. In: Research Policy 43 (2014), pp. 505–518 available at http://www.sciencedirect.com/science/article/pii/S0048733313001662 [Accessed June 12th, 2016].

Annex III. Resources Consulted

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- Original proposal;
- Project Approval Document;

- Stories of Change;
- Final Technical Report;
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- Project profile.

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- Original proposal;
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Annex IV. Unanticipated Results

Introduction

This Appendix identifies significant unintended results of the Fund, based on the survey of PIs, interviews with key informants, documentary review and field visits. It should be noted that while some of the positive results reported in this Annex may have been intended by those who planned or designed the Fund, they were considered to be "unintended" or "unexpected" by the individuals consulted during the evaluation.

There have been several significant positive unintended results and a few negative ones. **Notably, no negative environmental or socio-economic impacts have been reported for any of the projects carried out to date.**

Positive Results

Based on the available information, there are 7 main types of positive unintended, or unexpected, results:

- The speed at which results could sometimes be achieved
- The many benefits from partnering and networking
- Key roles played by multi-stakeholder platforms and cross-sector partnerships
- Use of research results and facilities for purposes not originally envisioned
- Influences on national and regional policies
- Learning from the field
- Changes within IDRC and GAC

Examples are provided for each of these types of results.

The speed at which results could sometimes be achieved

In several cases, PIs were surprised at the speed with which results were obtained.

- "The work conducted in Phase I was equivalent to over three decades of previous activity." –
 Canadian PI
- "Adaption of our technologies by farmers [was] even before we anticipated." Canadian PI
- "[We were surprised with] the speed with which we were able to get positive results." Canadian
 PI
- "Much as we are just in our first six months of the 28 months' implementation period, the Project is noticing appreciation by the farmers, local and central government and private sector. This was not expected." DC PI

The many benefits from partnering and networking

Many stakeholders note that the benefits of partnering and networking often went beyond those originally expected. Examples:

"The CIFSRF project thus far has been very beneficial to us as a parastatal organization. We are happy with the various partnerships that CIFSRF has enabled. Partnerships are not only with Canadian experts but we have also been able to engage with others on the continent in South Africa and in Morocco to share ideas. These types of interactions would otherwise not have happened with CIFSRF. I am very impressed with the organization and the planning and the clarity with which the process is unfolding." – DC Partner

- "Establishment of a Regional Pulse Platform, whereby the stakeholders show high interest in the Innovations. This will ensure sustainability after the project phases out." – DC PI
- "Strengthening international Kenyan-South African (ARC)-Canadian government relationships." –
 DC PI
- "We have been able to receive further assistance from CESO-SACO in Canada for the development of several strategies for scaling up our finacial services and innovations." – DC PI
- "Bolivian partners had an opportunity to meet with several First Nations representatives on Vancouver Island to share their experiences with indigenous governance of traditional territories and fisheries." – Canadian PI
- "International cooperation is also fostered through anglophone-francophone relationship." DC
- "The relationship between Hawassa University and the University of Saskatchewan continues to grow. Other faculty in my department (Soil Science) have become involved in other IDRC projects, largely because they were able to see and hear the benefits of involvement." – Canadian PI
- "[There is] substantial interest by US universities in collaborating with McGill on future work." –
 Canadian PI

Key roles of multi-stakeholder platforms and cross-sector partnerships in innovation and scaling up

Engagement of public and private actors, through multi-stakeholder platforms, has exceeded expectations and the platforms have played key roles in innovation and scaling up. Farmers' groups are also playing roles outside of those originally envisioned.

- "One of the main unexpected results of the first phase was the active and ongoing participation of local actors on various strategic activities." – DC PI
- "Experience sharing with other provinces. Being more networked with other provinces and districts and communes." – DC Partner
- "Good interaction between researchers and populations, farmers, developing agency are established to fight for food security improvement." – DC PI
- "I have met so many people through the trainings, from different villages in the district. During the training, I have shared my experience and learned from others. I also hope to share my knowledge and experience with other members." – DC Beneficiary
- "I think one of the main unexpected results of the first phase was the active and ongoing participation of local actors on various strategic activities." – DC PI
- "Formation of a cooperative by the farmers in the community to help each other out and also come together as a unit to support each other financially." – DC Beneficiary
- "During Phase 2 one of the positive elements was precisely the active participation of some public actors in the development process of the sector through multi-stakeholder platforms. We

highlight some municipal governments through their productive development secretaries, in addition to the National Health and Food Safety Office (SENASAG)." – DC PI

- "Farmers are organizing themselves into groups to sell their produce together so that they can get a higher price. This is only beginning. We are looking to see if we can help formalize some of these groups." – DC Partners
- "An unexpected result was the level of engagement by CEPAC, a third partner in Phase 1 and current aquaculture partner in Phase 2." – Canadian PI
- "Creation of farmers' producer companies and linking of urban poor consumers with producers." –
 Canadian PI
- "Small and medium food product manufacturers taking on the responsibility of distributing millet products." – Canadian PI

Use of research results and facilities for purposes not originally envisioned

At the project level, some researchers and collaborators note that research results and facilities developed for specific purposes have shown potential for use in other areas too. Examples:

- "We have identified some antigens, which are prospective candidates for vaccine against more diseases then only the target CBPP." – Canadian PI
- "Equipment installed is the first of its kind for animal health research in Sub Sahara Africa and will be used for purposes far beyond the purpose of the project, to create a centre of excellence for both human and animal health vaccines research under one roof." – DC PI
- "We were at a meeting a couple months ago where farmers said they were thinking of other fruits. For papaya, the skin gets damaged in transit so by spraying with hexanal, see whether it will withstand the transit. Representatives from trade were there and want to get the technology licensed. The project team had not thought about this before. In short, other fruits are being considered." – DC Partner
- "[There is] opportunity for scaling Phase 1 experience in other areas of aquaculture." DC PI
- "Partnering on Vitamin A fortification in Tanzania with crude sunflower oil at the SME level is leading to research & pilot projects in Colombia with panela (brown sugar) at the SME level." – Canadian PI
- "The nutrition-related findings were unexpected. Finding of B1/Thiamine deficiency, which appeared but was not being researched. Spinoff was that a Canadian PhD student fortified fish sauce with Vitmanie B1. This was not part of the original plan. Student got additional funding for this too. This was ground-breaking information not previously known." IDRC Staffperson

Influences on national and regional policies

Some policy impacts were also achieved more quickly than expected. For example:

"The national government became more aware of the sector's potential contributions to food security and food sovereignty; subsequently, new legislation was passed, creating a new national department for the sector with the equivalent of USD \$80 million committed over 3 years to support continued development of the sector and small-scale farmers. Several of the local partner organizations were able to secure funding from the national government for complementary research." – Canadian PI

"Results of the APM Project with emphasis on Neglected and Underutilized Crops finds a place in the Chennai Declaration adopted by 22 countries in the Asia Pacific Region and endorsed by the FAO, IDRC, IFAD, WFP and CGIAR and UN Women." – DC PI

Learning from the field

Many researchers note that valuable lessons have been learned from working with farmers – learning about small farmers' (especially women's) circumstances, priorities, knowledge, and innovativeness, as well as about the performance of potential innovations under farmers' conditions. Examples:

- "Farmers of this marginal area accepted research results more easily than expected." DC PI
- "Peasant communities [were] very motivated on genetic diversity conservation. In Cuzco, three
 communities adopted potato landraces for in-situ conservation and seed production." DC PI
- "We have appreciated how difficult it is to use eVouchers for small, regularly purchased items and will likely recommend this not be done in future." – Canadian PIs
- "Researchers of the project found that as a result of collecting the available local varieties an indigenous finger millet variety called 'Kiri Kurakkan' was far better – more productive – than the varieties developed by the researchers." – DC PI

Changes within IDRC

At IDRC, unexpected results have included a virtual "revolution" in both thinking and management within the AFS Program. Management processes and systems developed by CIFSRF for managing large and complex partnership projects with co-financing are now being used across IDRC's AFS program and more widely within the organization.

- "Thinking in IDRC's Agriculture And Food Security Program has been revolutionized over the course of implementing the fund. We have been challenged to put things into a performance management framework. We have redesigned our calls for proposals. We have rethought how we evaluate and select projects, how we manage them, and how we communicate the results. We still haven't communicated our new "model," but I believe we have a model for how the CGIAR should work." IDRC Staffperson
- "Working with Global Affairs and managing the fund has had in an enormous impact on IDRC. One impact was the very significant increase in funding for food security work." IDRC Staffperson

Through developing the governance, management, monitoring and reporting systems needed for the Fund, IDRC has greatly strengthened its capacity to manage large, complex, multi-partner programs in the future.

Other significant developments, noted in the Final Narrative Report for Phase 1, include the following:

- Launching of the CA\$15 Cultivate Africa's Future Fund in 2013 by IDRC and Australia's Centre for International Agriculture Research.
- Establishment of the Livestock Vaccine Innovation Fund, supported by IDRC and partner
 organizations. This new fund involves spinoff activities from vaccine projects supported by CIFSRF
 and a broader portfolio of new vaccines and applications.
- The CA\$70 million Collaborative Adaptation Research Initiative in Africa and Asia program jointly funded by IDRC and the UK's Department for International Development.

 CIFSRF also provided insights into the design of a new program on youth employment in agriculture in partnership with Master Card Foundation, and a new project on innovative financial services and business models for scaling up agricultural innovations.

Negative results

Stakeholders report few negative unintended results. As noted earlier, and significantly, no negative environmental or socio-economic impacts have been reported for any of the projects carried out to date. The few negative results noted by those consulted during the review relate to:

- The limited time for project implementation
- Administrative burdens
- Uncertainties relating to "scaling up"
- Emerging issues related to marketing and value chain development

Limited time for project implementation

One of the negative results noted frequently by PIs was the limited time available to achieve project objectives.

- "[There was] inadequate time to address the real issues facing communities." Canadian PI
- "It was unfortunate that our work could not be continued in phase II." Canadian PI
- "Lack of continued technical support has halted the progress." Canadian PI
- "Due to lack of sufficient time for intervention, [it is] difficult to show the impact of the project." –
 DC PI

Administrative burdens

An unanticipated challenge was the need to develop complex and costly administrative and management systems and procedures at IDRC and in grantees' organizations, to handle the Fund's increased administrative, technical, monitoring and reporting requirements (see Sections 2.6 and 3.6 in the main report, on Efficiency). Related to this point, there has been a substantial increase in the workload of several individuals in grantee organizations, IDRC and CIDA. An illustrative quote is provided here to supplement the analysis provided in other sections of this report.

"This project is much more work than anyone imagined. A huge workload! For instance, in terms of delivering calls, reporting, delivering etc. 50 submissions were anticipated per call, but 200 would come in." – IDRC Staffperson

Uncertainties related to "scaling up"

The new emphasis on scaling up may be reducing the clarity of CIFSRF's mission, as there is some confusion between "scaling up" and "development" activities more generally. Project teams are feeling the added pressures, because they are implementing increasingly complex projects with short timelines often in uncertain environments. There are increasing, and in some cases unmet, demands for expertise and skills in such "new" fields as business development and facilitation of multi-stakeholder platforms. Differences are also being surfaced as to the most appropriate way to pursue scaling up goals.

"I can't say what CIFSRF's niche is in Phase 2. I wouldn't be able to determine the difference between CIFSRF Phase 2 and a bilateral project ... Phase 2 is duplicating what bilateral projects could do with research funds." – GAC Staffperson "We found differences between the private logic that the project is promoting and public efforts that seek to generate awareness in food security, which include subsidies and non-reimbursable expenses that distort the private enterprise logic that is key for scaling up." – DC PI

Marketing and value chain development

In some projects, where results are being scaled up and production is increased, issues related to marketing and value-chain development are calling for increased attention. Examples:

- "Marketing is a challenge and we can look into the access to market question. Value addition training will be a way to go to increase income for the farmers. Women from the urban areas come to purchase the produce in bulk, why not work with the farmers to do the value additions themselves so that they can make more money." – DC Beneficiary
- "Markets for indigenous vegetables will be the primary limitation on productivity." Canadian PI
- "Value addition and proper market linkages of the products not only improved the socio-economic status and health of the local folks but also reduced the drudgery of the women and entrepreneurship development skills through self help groups (SHGs)." – DC PI
- "It's essential to look at the entire production, distribution, marketing and consumption system. It isn't enough to look at just one component of the system, such as production." DC Partner

Annex V.

Phase 1 Strengthening Canadian -Developing Country Partnerships

Illustrative Quotes

The following quotes are illustrative of the perspectives that have informed the analysis provided in the main body of the report.

- "Each PI is responsible for certain objectives and thematic areas (though all PIs contribute to the objective) and the project coordinator ensures that all PIs work in a coordinated manner... The partners were each assigned an area of responsibility based on their comparative advantage. In fact, the partners were selected at proposal stage based on their comparative advantage." Small group discussion of Canadian and DC PIs
- "[CIFSRF is] promoting partnerships and capacity development among both Canadian and developing country researchers, and providing support to each partner equally." – Canadian PI
- "Both [Canadian and developing country partners] learned a lot and got out of this equally. [The developing country partner] now developed rigorous monitoring and evaluation, which is not something that it had done in the past. Learning for Canadians has been very important... Many Canadians getting jobs as a result of their involvement. The capacity of the Canadians to do this kind of research has increased." Canadian PI
- "It was one of the conditions by design of the CIFSRF project that there will be Canadian and Southern collaboration and that has been a requirement and the condition of the CIFSRF overall. Our assessment of the contribution is that Canadian experts have provided key roles, solid science, expertise in the analysis and access to methodologies that were not available to partners in the South. This has been a true win-win for not only partners in the South but Canadian partners as well. They have access to data that otherwise they won't have, field sites and this has led to the integration of truly interdisciplinary teams and that is what has led to the success of the projects. They have both benefited from that. That is the contribution that CIFSRF is making." IDRC Staffperson
- "Partners with a track record get off to a better start overall. Otherwise, it takes more time." –
 IDRC Staffperson

Partnership Characteristics Analysis

A comparative qualitative analysis was undertaken of project partnerships, drawing largely on Phase 1 Project Completion Reports (PCRs; in some cases, additional documents were drawn upon where PCRs were not available). See Exhibit V.1 below.

The majority of project teams funded in Phase 1 presented with many or most of these beneficial partnership characteristics overall (12/19), reflecting the attention paid to the quality of partnerships at the project selection stage and also the support provided in their favourable development. The balance of projects (5/19) exhibited some notable challenging partnership characteristics.

Of the 12 Phase 1 projects that went to Phase 2, 9 exhibited most beneficial partnership characteristics. The balance funded into Phase 2, 3 projects, presented with mixed partnership characteristics. Of the 7 Phase 1 projects that did not receive funding into Phase 2, 3 presented with many challenging partnership characteristics and 4 with many beneficial ones.

Overall, the data suggests that a good partnership is a good indicator of a promising project, notably one funded into Phase 2. At the same time, partnership does not appear to be the single predominant factor in projects being funded into Phase 2. In conclusion, CIFSRF's investment in supporting the development of good partnerships thus appears to have been well-reasoned and worthwhile.

Exhibit V.1 Partnership Characteristics

Projects	Partnership characteristics	Collaboration prior to CIFSRF	Complementarity of roles	Diversity of experience	Issues of respect and trust	Communication/ Coordination	Effective Leadership / Concerns	Source	Phase 2 funding
Project A		15+ years of previous work	Steadily improved throughout	Steadily increased throughout	None noted	Good coordination, Valuable IDRC PO support reported	Strong leadership	Phase 1 PCR	Yes (and extension)
Project B		Strong and well- established prior partnership among Indian partners, but not with Canadian	Valuable	Adequate	None noted	Management and mitigation efforts	Initial leadership concerns	Phase 1 PCR	Yes
Project C		Built on an active partnership	Clear and Strategic	Multi-sectoral engagement	None noted	Strong PO involvement	Strong, joint leadership	Phase 1 PCR	No (only extension)
Project D		Partnership was "incompletely formed at time of approval"	Under-utilised	Strategic diversity	Team building and interpersonal relationship issues	Heavy PO involvement and other support required	Problematic	Phase 1 PCR	No
Project E		Diverse history of prior partnerships	Under-utilised	Diverse but challenging	Slight	Significant PO involvement and guidance	Strong PI leadership	Phase 1 PCR	Yes

Projects	Partnership characteristics	Collaboration prior to CIFSRF	Complementarity of roles	Diversity of experience	Issues of respect and trust	Communication/ Coordination	Effective Leadership / Concerns	Source	Phase 2 funding
Project F		Developed for project	Clearly articulated	Cross- disciplinary and integrated approach	None noted	Good coordination reported	Good leadership (but staffing issues)	PAD, Final Technical Report (No PCR available)	No
Project G		Not based on a long-term partnership	Not clearly in evidence, particularly in terms of Canadian partner	Inappropriate	Evident	Exemplary, Valuable IDRC PO support reported	Mixed leadership	Phase 1 PCR	Yes
Project H		None in evidence	Insufficient to goals	Good diversity	None noted	Tireless management and coordination	Strong leadership	PAD; Phase 1 PCR; Final Technical Report	No
Project I		Long history of relationship	Strong evidence	Appropriate diversity	None noted	Adaptive and effective	Important staffing issues; Concern about PO support noted.	Phase 1 PCR	No
Project J		Variable history of partnership	Strong evidence	Strong diversity	Disengagement; conflict	Poor coordination	Asymmetric leaders	Phase 1 PCR	Yes
Project K		Prior familiarity and collaboration in evidence	Clearly articulated	Strong diversity	None in evidence	Adequate	Strong leadership; Valuable PO support	Phase 1 PCR; PAD; fieldwork	Yes
Project L		Developed for project	Poorly articulated and practiced	Strong diversity	In evidence	Problematic	Mixed leadership	Phase 1 PCR; fieldwork	No

Projects	Partnership characteristics	Collaboration prior to CIFSRF	Complementarity of roles	Diversity of experience	Issues of respect and trust	Communication/ Coordination	Effective Leadership / Concerns	Source	Phase 2 funding
Project M		None in evidence	Limited; Little evident value- added of Canadian partner	Diverse but challenging	Issues, disagreements	Problematic; conflictual	Leadership issues (multiple); PO involvement required	Phase 1 PCR	No
Project N		None in evidence	Evident	Strong diversity	Strong respect between all actors	Minor issues	Minor leadership issues	Phase 1 PCR	Yes
Project O		Longstanding previous collaboration	Evident	All academia, each with own expertise	Trust based on prior collaboration	Excellent	None evident	Phase 1 PCR	Yes
Project P		Strong and well established prior partnership	Clearly demonstrated	Strong research and development diversity	None evident	Excellent mechanisms	Strong leadership	Phase 1 PCR; fieldwork	Yes
Project Q		None in evidence	Complementary but capacity issues in evidence	All academia, each with own expertise	None evident	Issues with one local partner	Lack of leadership & capacity by one local partner; but good advisory board	PAD, Phase 1 PCR	Yes
Project R		Previous working relationship existed, between individuals and institutions	Strong value- added both ways	All academia, each with own expertise	None evident	Minor issues, resolved adequately	Lead by team of world-class scientists & an international advisory board	Phase 1 PCR	Yes

Projects	Partnership characteristics	Collaboration prior to CIFSRF	Complementarity of roles	Diversity of experience	Issues of respect and trust	Communication/ Coordination	Effective Leadership / Concerns	Source	Phase 2 funding
Project S		Yes for all partners with IDRC, no with each other	Strong evidence	To some extent – all partners' academics	None evident	Strong collaboration	None evident	PAD; Phase 1 PCR	Yes

Legend: Mint green indicates a beneficial characteristic; Light salmon indicates a mixed beneficial/challenging characteristic; Dark orange indicates a challenging characteristic; Dark green (9) indicates funded into Phase 2 with beneficial partnership characteristics; Dark red (3) indicates non-funded into Phase 2 with/due in part to challenging partnership characteristics; Grey (4) indicates non-funded into Phase 2 despite good partnership characteristics; Burgundy (3) indicates funded into Phase 2 despite mixed partnership characteristics.

The list of partnership characteristics above has been informed by Universalia's institutional understanding of what makes for successful partnerships. Our more comprehensive list of characteristics is as follows, where partnerships:

- 1) Provide clear/consistent information within and across members, which increases trust and interconnection
- 2) Create and use M&E systems, which also inspire trust among members
- 3) Invite right partners at beginning, embrace new partners if need be, allow partners to exit
- 4) Encourage members to express individual goals, clarify expectations regarding contributions and benefits
- 5) Pay attention to and review/revise institutional arrangements
- 6) Adopt business model that aligns resources with goals of the collective
- 7) Adapt to their environment, identify their niche
- 8) Serve the greater good, but work together in focused and targeted way
- 9) Are those where partners demonstrate ownership of the endeavour
- 10) Are able to demonstrate the synergy effect

The list has been derived from, Dr. Marie-Hélène Adrien, "Using Evaluation Evidence to Improve the Effectiveness of Partnership Programs: Capturing the Parameters of Partnership Success – Reflections on Universalia Experience", March 16-17, 2016.

Annex VI. Phase 1 Harnessing Canadian Expertise

Illustrative Quotes

The following are quotes from interviews conducted as part of the evaluation's data collection. Particularly revealing comments from Canadian and DC PIs about specific projects have been omitted in order to respect the evaluation team's commitment to the anonymity and confidentiality of respondents.

- "Canadian scientists have certainly added value." DC PI
- "One of the added value of Canadian expertise is that Canadian experts in general bring important experiences from other countries... Being able to take these lessons learned from other countries bring value added to the project. In addition, Canadian organizations have strong analytical expertise." – DC PI
- "Canadian expertise has been invaluable. The project could not have happened without the technological know-how of the Canadian experts on this team..." – DC PI
- "Contribution of Canadian Partner exceptionally high." DC PI
- "Also a very good initiative. A couple of times there were people coming from the Canadian university and CIFSRF and also evaluators, which makes a better initiative and the project has benefitted from that." – DC National Authority
- "Extremely beneficial. Canadians had enabling technology, knowledge as well as expertise that DC partners did not have." Canadian PI
- "The Canadian expertise drives this whole thing." Canadian PI
- "The fund was very successful in mobilizing Canadian expertise to look at tropical agricultural topics and to link with southern institutions. The Fund's Calls were open, but most proposals came from Canadian universities, which are well prepared to prepare the type of proposals needed." GC Member
- "This has largely been knowledge sharing from the North to the South, but not completely. I would say about 75% from North to South, and 25% from South to North. Now, from the North to the South, we have seen experience sharing in terms of how to write proposals that qualify for Canadian funding. We have also seen a contribution in terms of capacities of research materials, methodologies and processes. From the South to the North, we have seen a growing capacity in terms of appreciation of the reality of the context, and also the ability to deliver things on the ground (e.g. logistics)." GC Member
- "In scoring Concept Notes and Proposals, SAC looks for value added from Canadian universities. Canadian expertise has definitely been mobilized. But one should ask how much this has contributed to the projects. What's the value added of Canadian organizations? Answering this question would require a project-by-project analysis." SAC Member
- "The technical expertise, the coaching and overall experience from Canada is key to encadrement. This transfers even to local community-based organisations. This works well. It builds the capacity of local organisations and people themselves..." – Canadian Embassy Staffperson

- "I am not sure the Canadian case and contribution is unique but there is Canadian contribution in all cases, e.g. vaccines. In all cases, there is Canadian input, though some more than others. The incorporation of the Canadian contribution is a key success factor but it is not unique in the world. It is undoubtedly a success factor. You can see the value of linking a developing organisation with a Northern one. They leverage the experience of one another. There is comparative success with and without Canadians. The tracking of the Canadian contribution is now in place." IDRC Staffperson
- "Very mixed. Some outstanding, some not so outstanding. [G]reat value in giving Canadians the opportunity to do this kind of work, as it allowed Canadians to build up their development reality. Canadians also hindered their work, because of differences in culture and a different perception of needs... Canadians have been a huge benefit overall but have really gained overall... This program has actually built lots of Canadian capacity..." IDRC Staffperson

Evidence of Canadian Knowledge and Expertise

The following passages from Annex A of the Phase 1 Final Report (p.27) provide compelling evidence in support of the finding in the main body of the report.

- "Effective research partnerships do more than deliver on project objectives. The vision for CISFRF was that Canadian knowledge and organizations would substantively contribute to improved food security. Overall, Canadians and their know-how have contributed significantly to project implementation. For example:
 - Vaccine development project (106930) leveraged world-class Canadian laboratories and researchers with applied animal health specialists in Africa, led to a breakthrough in developing a multivalent vaccine for sheep and goats against lumpy skin disease, peste des petits ruminants, Rift Valley fever.
 - 2) A technological project on post-harvest loss project (106931) that blended Canadian know-how of Hexanal with nanotechnologies for fruit packaging was successful in extending harvest and enhance the shelf life and quality of fruits, especially with mango and peaches, thus reducing soft fruit losses for growers. They have developed and patented wrapping tissues.
 - 3) Canadian mechanical engineering proved indispensable in the development of labour-saving and value-increasing models of a millet dehuller, tested and adapted in different sizes for small- scale farm and village-level use (106506, 106314). It increased millet consumption, improved the value chain at all levels, proven a nutritional therapeutic food particularly for diabetes, and had significant positive impact on reducing drudgery for women.
 - 4) World-leading Canadian technology was leveraged for the biofortification of pulses and potatoes, and improved nutrition through varietal selection and soil management (106305, 106926, 106927).
 - 5) Aquaculture systems improved household food security and more sustainable livelihoods, especially for indigenous communities and women farmers (106524, 106928)."

Annex VII. Phase 1 Generation of New Knowledge

Information Provided by CIFSRF PMS

The main source of systematic information on knowledge production (as on other Fund objectives) is that provided periodically by project PIs and recorded in the Fund's program-level database (managed by IDRC). 4 indicators were used to track knowledge generation at the output level, and 2 at the level of immediate outcome. Results are summarized in Exhibits VII.1 and VII.2.

Exhibit VII.1 Immediate Outcome Targets and Results, Phase 1

OUTCOME / INDICATOR	TARGET	RESULT				
Outcome 200. Increased global, national, and local knowledge of new, environmentally sustainable and gender sensitive research applications that increase agricultural productivity and the nutritional value of food in developing countries						
200.1. No. of new, gender sensitive applications developed	At least 19 new field tested applications developed	Achieved. CIFSRF projects developed and tested 144 innovations, 48 in Sub-Saharan Africa, 68 in Asia, and 34 in LAC.				
200.2. No. of publications	Each project has prepared an average of 3-5 publications	Achieved. 167 peer-reviewed articles were published (not including 40 in press), or an average of 8 per project. Projects dealing with vaccines had limited publications due to pending patents.				

Source: Final Narrative Report, Annex A.

Exhibit VII.2 Output Targets and Results, Phase 1

OUTPUT / INDICATOR	TARGET	RESULT						
Output 210. Number of resea	Output 210. Number of research projects completed							
210.1. No. of research projects completed	All projects successfully completed	Achieved. All final technical reports can be accessed in the IDRC Digital Library.						
210.2. No. of pubs. submitted or accepted in peer-reviewed publications	All projects have submitted an average of 3-5 publications	Achieved. A total of 167 peer-reviewed articles were published by March 31, 2015, 40 more were in press at the time, and several more have been published since that date.						
Output 211. Application-read improved FS based on field re	•	able, gender sensitive practices, technologies and methodologies for						
211.1. No. and quality of relevant application-ready technologies developed	All projects have developed applications available.	Achieved. 144 "application-ready technologies," or "innovations" were developed, relating to such themes as farming practices, dietary improvement, environmental sustainability, and access to markets.						
211.2. No. of projects that use a participatory approach	All projects use participatory approaches	Achieved. A total of 49,136 female farmers and 64,102 male farmers were involved in testing new technologies. Additionally, 4,392 other stakeholders (extension workers, academics, policymakers and NGO staff members) were also involved in the testing.						

Source: Final Narrative Report, Annex A.

From the foregoing exhibits, it can be seen that evidence of increases agricultural productivity and the nutritional value of food is not recorded in the Fund's program-level database. This is not surprising, since this database forms part of a performance measurement system that records information provided periodically by PIs. These researchers cannot be expected to have the research skills, resources and independence needed to provide objective measures of the outcomes of their own projects. As indicated later in this report, in future, it would be valuable to complement the Fund's (excellent) performance measurement work with independent outcome evaluations for individual projects.

Information Provided by the Survey of Principal Investigators

Our survey of PIs indicates that Canadian PIs have a somewhat more positive perception than DC PIs, of the extent to which CIFSRF has generated new FS innovations. When asked their views on the statement, "CIFSRF has generated new food security innovations," 70% of Canadian PI's strongly agreed, but less than half of the DC PIs strongly agreed.

Exhibit VII.3 "Based on Your Experience and Knowledge of CIFSRF, Please Select The Answer That Best Reflects Your Views on The Statement":

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE	NOT ABLE TO JUDGE	NO. OF RESPONDENTS
	(%)	RESPONDENTS
DC PIs	0	3	33	46	18	39
Canadian PIs	0	0	18	70	12	33

Source: Survey of Pls.

We did not have the opportunity to conduct follow-up interviews with PIs to identify the reasons for this difference. But we suspect it might be related to confusion over the meaning of such terms as "innovation" or "application-ready solution" (see Annex VIII).

Statements in PI Survey

- "The work conducted in Phase 1 was equivalent to over three decades of previous activity IDRC is to be congratulated for taking a chance on this work."
- "We have identified some antigens, which are prospective candidates for vaccine against more diseases then only the target CBPP."
- "Combination of social science surveys and GIS-based mapping provided novel insights into how demonstration farmers are chosen and what fields they choose for the demonstrations
- "The Phase 1 of the project helped us to understand the science part of the technology development. For instance, during the Phase 1, 8 students (3 Ph.D and 5 M.Sc) had done their theses. This serves as a strong data base to evolve technology to minimize the post-harvest losses in fruits."
- "Wild vegetables that were highly nutritious but were hitherto uncultivated and on which agronomic information were not available have now been brought into cultivation and agronomic packages have been developed for them."
- "Nutrition gardens enriched the household dietary baskets in terms of legumes, vegetables, leafy greens and tubers and reduced their reliance on markets."
- "Fish farming in small ponds helped increase dietary animal protein."

Illustrative Quotes: Statements from Stakeholder Interviews

- "The project's pre- and post-surveys generated a tremendous amount of valuable new information." – Canadian Partner
- "This type of project allowed me to get away from the lab and into the field... it was a transformational experience ..." – Canadian PI
- "Studies have been undertaken as part of the project on the best balanced diet to give to Pacu (a Bolivian pond fish) so that it grows optimally and that production is increased. This knowledge has been shared with fish farmers and was being used at the time of the visit." – DC Partner
- "This farmer has observed testing of Hexanal on his mango trees for four years now. He has been comparing control and treatment trees for that long. Treated trees have more photosynthesis which increases the phytotonic effect, greener. So it directly influences yields (increases) and the quality of the yield. The Hexanal extends the shelf life by 15 days (on the tree). And that will get us a better price on the market." DC Beneficiary
- "We are researching and trying to look at factors that will influence the adoption of the new vaccine in the Somali ecosystem. Not a lot data is available in this region. We generated a lot of new knowledge in this region. Establishing cause effect relationships which have not been done before." – DC Partner
- "In areas like in Ethiopia we have moisture rich areas and moisture stressed areas. Farmers used to be happy with one crop per year. But this project has demonstrated farmers can also obtain two crops from same land in a year. This is the advantage." – DC Partner
- "Several projects did good-quality research (reflected in publications) and also reached large numbers of people. You could go to the field and see lives being transformed. There was evidence of change. You could see that farmers were more confident..." – IDRC Regional Staffperson
- "HKI was integrating food production into the homestead originally. With CIFSRF, now HKI did research on different aspects of food production. E.g. the fish program which is new to HKI. Research was important for the distinctiveness of value of different practices of HFP (homestead food production)." – DC Partner
- "The project is already generating new knowledge with a high potential for more. In the whole of East Africa, CBPP is the disease that should be geared towards eradication, second after foot and mouth disease." – DC Partner
- "The project was a good attempt to improve the lunches, but to reduce childhood obesity, a much more comprehensive program would be needed. And unless the budget increases, few improvements can be made in the lunches." – DC Partner
- "A lot of agricultural research was done, but none of the data was shared with us. This was a major disappointment. If you want cooperation for future research, you must share the data and we must benefit from the research." DC Partner

Annex VIII. Phase 1 Terminological Confusion

During the evaluation, the evaluation team noted a lack of clarity and some evolution in terminology used, which can lead to misunderstandings and differences in perceptions.

For example, in Annex A to the Final Narrative Report, on page 35 it is stated that, "an innovation refers broadly to the solutions being tested by researchers and the methods used to create them. These could be a technology, methodology, or practice used to refer to a new way of doing or organizing something." This is a very broad definition of innovation, which differs from definitions used in mainstream professional literature on science and innovation systems (Hall 2009; World Bank 2012).

More confusing yet is the statement on page 38 of Annex A: "A technology refers broadly to the solutions tested by researchers and the methods used to create them. These could be a technology, methodology, or practice used to refer to a new way of doing or organizing something... The technologies can be broken down as natural science technologies Social science technologies ... or guidelines/policy options."

Given the confusion in terminology, it is possible that Canadian PIs consider the Fund to be more successful in generating innovations because they view "innovation" as synonymous with "promising research result." On the other hand, DC PIs may view an innovation as something actually applied successfully on farms (the common definition in innovation studies).

The evaluation team encourages the Fund to adopt mainstream definitions, such as those presented in the World Bank's sourcebook on agricultural innovation systems (World Bank 2012), which distinguishes between research outputs (e.g., new information and technologies) and innovation processes (by which individual or organizations actually bring about changes in their practices).

Annex IX.

Phase 1 Improved Ability of Developing Country
Organizations to Implement and Support New Food
Security Solutions

Introduction

A common weakness of innovation funds is their limited contribution to capacity building. As Ernstberger and Rajalahti (2012: 383) note, "the risk of 'projectivization' and the accompanying failure to build capacity are acute in grant schemes, especially in competitive grant schemes, which do not require ... counterpart funding." Information in the Fund's program-level database and that derived from our interviews with stakeholders indicates that activities carried out by the Fund contributed to the capacities of participating individuals to implement and support new FS solutions developed by the Fund. There is less evidence of organizational capacity development.

Information Provided by CIFSRF PMS

The program-level database contains information on the progress toward capacity targets related to the ability of DC organizations to implement and support new FS solutions. However, as can be seen below, these relate more to activities and outputs than capacity-related outcomes per se.

Exhibit IX.1 Ability of Developing Country Organizations to Implement and Support New FS Solutions

OUTCOME / INDICATOR	TARGET	RESULT						
Outcome 300. Improved ability of developing country organizations involved in research to implement and support environmentally sustainable food security solutions, with a focus on women and women farmers								
300.1. No. of new FS applications tested / implemented and supported by DC partner organizations	At least 19 new food security applications tested / implemented by developing country organizations for smallholder farmers	Achieved. 383,015 individuals were reported to be adapting and using CIFSRF technologies at the end of Phase 1. Of these, 129,397 had previously tested the technologies, and another 253,618 had not been involved in the research.						
300.2. No. of women and men trained on new applications to support the implementation of the projects and its actors	All projects have trained women and men on new applications to support the implementation of the project and its actors	Achieved. All projects held training events to support the implementation of new technologies. The total number of participants was 127,801 (64,270 men, 59,301 women, and 4,230 children).						

Source: Final Narrative Report, Annex A.

Exhibit IX.2 Output Targets and Results, Phase 1

OUTPUT / INDICATOR	TARGET	RESULT
Output 310. Knowledge ar projects	nd tools transferred to sm	allholder farmers, especially women, through research
310.1. No. and quality of knowledge transfer tools and events developed and held by research teams	All projects	Achieved. All projects held a total of 410 training or educational events, including such topics as: gender, small millets, seed production, field trial management, data recording, marketing, nutrition, mulching and value-added fish processing.
310.2. No. of participants attending knowledge transfer local events by gender	All projects	Achieved. 127,801 people participated in 410 knowledge transfer events (64,270 men, 59,301 women and 4,230 children). In addition to training members of partner organizations, CIFSRF projects trained 854 men and 1,494 women from other organizations.
310.3. Number of partner organizations that have developed a plan/strategy to implement new FS applications and support smallholder farmers	All projects.	Partially achieved. All but 1 project developed a strategic plan for informing policymakers in the DC where the project was being implemented. Nearly all projects also developed plans for informing researchers, development professionals and the private sector in the same country. Most developed plans for informing researchers in Canada and internationally, and about half made plans for informing the Canadian development community. In contrast, few project teams developed plans for informing policy makers or the private sector in Canada. And virtually none made plans for informing international policy makers or multinational firms.

Source: Final Narrative Report, Annex A.

Statements in Stakeholder Interviews

- In our interviews, many stakeholders referred to the development of individual capacities and some to development of organizational capacities. Some representative examples:
- Building relations with farmer-suppliers was valuable, and helped us reduce the price of fruits and vegetables. We have been able to continue this after the project. This has allowed us to improve the meals in all schools (not just in the 4 where lunches were initially improved)." DC Partner
- "The project has offered much capacity-building. Before the project, I planted a vegetable garden.
 With the project, I have received technical advice on gardens and farms and now I do it properly."
 DC Beneficiary
- "Provided support to the Cambodian Fisheries Administration: Provided technical assistance to a program that has been supporting rural households. Before the project, most farmers did not know how to grow fish in ponds. There was a lack of skills. With this program, people learned how to raise fish and then continued onwards." DC National Authority
- "The project in Phase 1 has contributed to increasing the capacities of fish farmers, especially of those from APNI (Asociacion de Piscicultores del Norte Integrado de Yapacani) APNI is a success story of the project. Capacities were built in the following areas: hygiene and sanitation, marketing, water management (of the fish tanks)." DC Sub-National Authority

- "Though support from CIFSRF, 2 women from APNI in Yapacani went to Brazil with one technician from CEPAC to receive capacity building in aquaculture. In Phase 1, there were a lot of exchanges between fish farmers of APNI in Bolivia and the Brazilian experts in areas such as nutrition." – DC Partner
- "In addition to supporting capacity building for the household survey, Faunagua also built the capacities of fishermen and women in Riberalta in thematic areas including hygiene and sanitary management of fish. Before the project, fishermen would go out and fish without using hygiene techniques." DC Sub-National Authority
- "Management capacities of the fishermen were also strengthened. In terms of management practices, they learned about accounting. They also learned techniques for how to count fishes in the river and also how to monitor and report on the fishes they caught." DC Beneficiary
- "Trained 11 students in India and Sri Lanka towards MSC or PHD degrees, more than half are women. And among the Canadian research associates trained, half are women 5 MSC students and 3 PHD scholars in India; 3 MSC and 1 PHD in Sri Lanka." – DC Partner
- "Training on integration of gender in research has been invaluable. This has allowed us to make sure that whatever we do benefits both men and women, that whatever we do incorporates both men and women." – DC Partner
- "From my observation and on committee on project operation I have seen lots of capacity building focused on human elements, training programs PhD and MA sandwich with Ethiopia and Canada on job training for specialists, farmers, associations, people in different institutions. Also there has been capacity building like showcases encouraging practitioners to adapt and check." DC National Authority
- "At the scientific level, young scientists are being sponsored to work on this disease. PhD and Masters students are being trained. Development and application of the vaccine scientists' knowledge is being sharpened both technically and also in terms of communication to aid in the scale up phase." DC Private Sector

Annex X.

Phase 1 Awareness and Understanding of New Food Security Solutions

Program vs. Project Level Communication

In Phase 1, the division of communication responsibilities and expectations between the program and project level was not thoroughly articulated from the beginning. This is corroborated by the 2012 Midterm evaluation: "Challenges are in supporting projects to identify who should be targeted in relation to promotion and scaling up; in the framing and communication of results at the project level, to be analyzed at the program level" (MTE p. 16).

Grantees were expected to promote projects and findings among their existing networks, yet during the course of Phase 1, the CIFSRF team recognised challenges with the communication of results to non-scientific audiences. "Researchers do not always regard it as their 'job' to write policy briefs, and would rather see themselves as providing the information and evidence required by others to do this" (Communicating Research Caribbean workshop document p.4). One-week workshops (South Africa 2013, India 2014, St. Kitts 2014, and Colombia 2014) were organised to "synthesize and translate research findings and outcomes, create appropriate messages, strengthen gender perspectives in communications activities, as well as work toward the scaling-up of results" (Communication and Research Uptake Action Plan 2012, p.7). In the strategic support offered, the Fund paid special attention to the ability of grantees to address and communicate to a range of audiences' questions of gender and social equity in agriculture. The Communication workshops are reported to have been useful to skill grantees in shifting the approach from informing policy makers to influencing policy.

DC and Canadian partners (Bolivian and Canadian partners): "The project team attended a communications workshop (...) in end 2014 which was organized by IDRC. All team members participated and it helped them learn how to develop and disseminate outcome stories from their project experience. There is now a communications strategy in the team and this has helped to find ways to disseminate research results."

Survey Data

Survey responses and stakeholder interviews (see Illustrative Quotes section below) indicate important gaps between CIFSRF's goals for improving awareness and understanding and its results.

The survey has 4 questions about awareness and understanding relating to Phase 1. Of all the answers, it is worth highlighting that 30.3% of Canadian PIs disagree that CIFSRF has contributed to improved awareness of potential solutions to food security issues among the general public in Canada. The significance of this figure is in relation to other survey questions: it is the highest negative response from Canadian PIs. In fact, looking more broadly at the answers of all Principal Investigators to the same question, fewer than 50% agreed or strongly agreed versus agreement rates of 81.9%, 69.5%, and 68% on questions of improved awareness and understanding among other stakeholder groups.

1. Question 5.8 (a) Phase 1 – awareness: Policy-makers in developing countries

Overall, of all PIs responding to the survey, 31.9% agreed and 36.1% strongly agreed that CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among policy-makers in developing countries (68% positive answers). 9.7% disagreed and 22.2% considered themselves unable to judge.

This point is corroborated by the 2012 Mid-term evaluation: "Linkages with policy makers are variable depending on project objectives and stage of implementation; the CIFSRF knowledge management strategy should contribute to this" (MTE, p.16).

2. Question 5.8 (b) Phase 1 – awareness: The development assistance community.

Of all PIs responding to the survey, a total of 81.9% answered that CIFSRF has contributed to improved awareness of potential solutions among the development assistance community (45.8% agreed and 36.1% strongly agreed). Numbers were relatively similar across Canadian and DC PI, male and females.

3. Question 5.8 (c) Phase 1 – awareness: the general public in Canada.

For this question, 48.8% of respondents believed CIFSRF has contributed to improved awareness in developing countries among the general public in Canada. Differences between Canadian and DC PIs were noticeable in this question: the survey registered the highest rate of disagreement by Canadian PIs with 30.3%. Similarly with males, 20.4% disagreed while no females did. Half of female PIs (50%) and half of DC respondents (51.3%) indicated they were unable to judge.

4. Question 5.8 (d) Phase 1 – awareness: the general public in developing countries.

In terms of survey respondents, 69.5% agreed or strongly agreed (38.0% and 30.6% respectively) that CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among the general public in developing countries. When comparing male and female respondents, we note that 77.8% of female PIs agreed or strongly agreed while none disagreed. For males, 66.7% of agreed or strongly agreed and 16.7% disagreed.

Illustrative Quotes

- "CIFSRF has gotten more engagement and media play in some developing countries than it has in Canada. In some countries articles in national papers, lots of conferences, have engaged other farmers and general public, schools, students. In Canada less so, prime route for engagement of Canadian public is through projects themselves." – IDRC Staffperson
- "Projects are not feeding into other Canadian development work, policy or programming in (project country). Not feeding into possible social media work on behalf of Embassy on year of pulses." – GAC Staffperson
- "Universities across Canada knew of this project. It was well disseminated." Canadian PI
- "CIFSRF has been well publicized and this has helped to make the government look good. The Fund has given Canadian aid visibility in the international agricultural research and development community." – SAC Member
- "CIFSRF can do more. They are not the best communicators and so the awareness is not happening. Communicating among even stakeholders that they fund is not great. There is not a lot of cohesiveness. Better communication [is needed] to ensure larger community has access to information regarding what is happening." Canadian PI

- "Our research creates awareness [among the general public in DC] but there is not much we do at the national level in terms of awareness. There has not been much to disseminate the results but we have caught the attention of the people." – DC Partner
- "The impact on the development assistance community and Canadians is probably still incipient, given the amount of information that bombards this community on a daily basis, and the remoteness of [certain project countries] to most Canadians." Canadian PI
- "Even NGOs who program in these areas, how aware are they of CIFSRF project in country? [CIFSRF] needs resources to get that messaging out there – project by project, thematic maybe more global – definitely need to get messaging out there to our own stakeholders." – GAC Staffperson
- "IDRC needs to find better ways to get their research shared more widely. But this should be part
 of a system, not a series of one-offs. (...) Communication to Canadians must be made better." –
 Canadian PI

Annex XI. Phase 1 Food Security Needs of the Poor

Exhibit XI.1 Food Security Pathway Framework

The CIFSRF portfolio employed a food security pathway framework:

1. The **food production pathway** elaborates the connections between food production and improved nutrition that make nutritious food available to households, including increased application of appropriate food system-based solutions that target agricultural productivity and nutrition and emphasize women small farmer needs in developing countries.

Research for this pathway included: developing new technologies to meet smallholders' needs; research to adapt and adopt existing technologies and practices; helping farmers increase incomes while minimizing environmental and social risks.

2. The **agricultural income pathway** affects nutrition in a nonlinear way by influencing the characteristics of food markets (the availability, affordability and convenience of foods of high nutritional quality) and by facilitating the purchase of nutritious foods.

<u>Research for this pathway included:</u> deepening small-holder participation in markets through linking farmers to consumers; adding value; stronger associations and new partnerships.

3. **The women's empowerment pathway** is built on evidence that empowering women improves nutrition for mothers, their children and other household members through women's use of income for food and other expenditures and their ability to care for themselves and their families.

<u>Research in this pathway included:</u> increasing collaboration between scientists and women farmers; increasing economic opportunities for women smallholders; reducing drudgery of agricultural tasks; increasing women's role in decision making.

There is also a parallel methodology of **enhancing policy uptake** of food security solutions highlighted in CIFSRF Phase 1 activities (discerning policy influence, influencing policies and plans in developing countries, improving awareness among policy makers in Canada, influencing other programs in Canada).

Source: Final Narrative Report, Phase 1

Relevance may additionally be viewed within a systems perspective, whereas it is not only the research result whose relevance for the poor and/or to women is to be assessed (with quantitative metrics such as pilot field yield increases), it is also the use and interactions of research results within local contexts. As noted in *Agricultural research*, *livelihoods and poverty* (Adato, M. & Meinzen-Dick, R. 2007. The Johns Hopkins University Press, p.1.), "Indeed, two major reviews of the literature on agricultural research and poverty reduction conclude that it is not just the characteristics of a certain technology that determine whether it will benefit the poor. Underlying social, economic, and cultural conditions also play a crucial role." A systems perspective also enables assessing relevance in relation to multiple time scales (projects may be more relevant to certain pathways at differing times.

Illustrative Quotes

"The burden of nutrition-related diseases is incredibly heavy. We need to start somewhere, and it was an excellent idea to start in primary schools. The project was relevant. There is no question about that." – DC National Authority

- "CIFSRF is very important to Cambodia. It is a very good model for Cambodian people. It supports the nutrition of rural households and women. It supports the national policy of Cambodia on food security. It is one of the most important programs on nutrition, poverty alleviation and general income." – DC National Authority
- "Before the intervention of the Canadian project, farmers were producing once in a year after the intervention of this project – on the same land, after harvesting the maize, they are harvesting chick peas – this is ensuring food security of people, additional food, additional income –additional nutrition. Great advantage for farmers in the future. This technology very very important for the farmers – they are improving their lives." – DC Sub-National Authority
- "The project is very relevant to the food security of the poor because there are lots of fish available for consumption in the Northern Amazon Basin in Bolivia but yet fish consumption among the local population is very low." – DC Sub-National Authority
- "The research conducted because of this study will have a positive impact on the livelihood of small scale farmers who often are poor, in fact the first beneficiaries will be women. Animal condition will be improved and the animal will fetch more money in the market. Vaccine is relevant and will be extremely beneficial to the small-scale farmer. It is the most important cattle disease after rinderpest which has been eradicated." – DC Partner
- "Highly relevant! The Fund has contributed to the food security strategy in the region [Asia] and with the particulars of climate change now, rice and wheat have come under serious concern. It is time to find solutions in drought-resistant, nutritious crops and this is what the Fund is doing. All projects are in one way or other contributing to caloric intake, nutritional status, higher protein consumption, and adding to nutrition." IDRC Staffperson
- "Some [of the projects] are relevant. Haven't quite got to the results yet. The ones like to hold up high like vaccines and nanotech I haven't seen backwards linkages to poverty reduction accurately articulated. A lot of them depend on commercial private sector intermediary unresolved how much economic benefit gain there will be with respect to the poor. Will intermediary benefit from strengthened mango chain how much of the value added will the private sector absorb? That is problem with strict research project not embedded in broader development not bringing on development NGOs to ensure greater equity results." GAC Staffperson
- "There are some common sense things that have been introduced that I think are great in terms of immediate needs like introducing pulses where primarily grains are grown, this can help to fertilize soil and add important nutrients into the diet and will help women who are primarily responsible. In terms of broader systemic approach to change and valuing role of local farmers and really supporting women in broader way where women gain broader sense of their own capacities, not sure I observed anything but I am on the outside a little." Key External Stakeholder
- "Hexanal really helps a particular part of the banana industry, it's not really for the small farmer. The benefit is in the transport. Hexanal extends shelf-life. There are farmers who contribute their banana produce to Farm Fresh Banana but it is not evident how the benefits of extended shelf-life for the company will affect these farmers." – Private Sector Actor

Annex XII. Phase 1 Private Sector Priorities

Pertaining to Governance

There was private sector participation on the Scientific Advisory Committee (SAC). It is reported in the final narrative report for Phase 1 that private sector participation in the SAC was instrumental in the decision to fund several projects.

Pertaining to Small-scale Private Sector Actors

- In an analysis of 8 randomly selected projects, using the 'Stories of Change' material, 5 of them had private sector involvement and they all belonged to the small-scale category. In one project, a national company was also involved.
- The 'Stories of Change' articulate well the high uptake of innovations by Category 1 private sector actors.
- A large percentage of survey respondents agreed that results generated by CIFSRF-funded research have successfully responded to the needs of small-scale private sector in developing countries. Those who agreed or strongly agreed: 68.9%, not able to judge: 22.2%, disagreed or strongly disagreed: 8.9%.
- Similarly, a large percentage feels that in the case of their project, the results of research have been adopted by this category of private sector actors. Those who agreed or strongly agreed: 64.5%, not able to judge: 22.2%, disagreed: 13.3%; strongly disagreed: none.

Pertaining to National-level Private Sector Actors

- This category of actors has played a role in testing technologies and in supplying seed to farmers' groups for production and sale.
- Many appeals have been made through interactions, presentations, and the sharing of research outputs to this category (see information below).
- This category of actors shows promise of a role in commercially innovative products, adding value, expanding markets, and reaching consumers more broadly. Their relevance is supported by the survey data. Those who agreed or strongly agreed that results generated by CIFSRF-funded research have successfully responded to the needs of the national level private sector in developing countries: 64.4%, not able to judge: 28.9%, disagreed: 6.7%, strongly disagreed: none. Those who agreed or strongly agreed that in the case of their own project, the results of research have been adopted by the national level private sector in developing countries: 53.3%, not able to judge: 31.1%, disagreed or strongly disagreed: 15.5%.
- However, this private sector category may stand to benefit income-wise more than the small-scale farmers who are selling their produce. By way of example, the Banana Fresh Farm is a large-scale industry in Tamil Nadu, India that exports bananas. After testing the Hexanal spray on bananas, they expect to expand their export market and make a bigger profit. Meanwhile, the farmers who furnish them with bananas and benefit from new technologies may not have a change in income. At the same time, as one scientist pointed out, these same farmers are still better off than the

ones who take their bunches to the local market and sell for almost nothing. It all depends on how you look at it.

Pertaining to Multinational Level

- A SAC member is from CropLife Canada. While the Fund did not target multinationals, there has nonetheless been an interest in attracting Canadian companies.
- The value proposition for large companies to become engaged is not apparent, a view shared by five respondents. Understanding the motives for Canadian companies especially to get involved is essential and the profit motive of multinationals may indeed be at odds with food security outcomes, local control and knowledge, and sustainability (reliance on external inputs, technologies with patent protections, etc). A couple other respondents felt that CIFSRF does not sufficiently understand the interests or the language of Canadian private sector to get them involved. One external stakeholder went further in cautioning that the commercial interests of Canadian companies places CIFSRF projects in the position of sourcing cheap labour, which is clearly opposed to the Fund's objectives.
- As part of the Fund's efforts to lend visibility to the portfolio, numerous field visits of senior officials from GAC and government took place. As stated in the final report, this included a presentation to the Canadian Parliament by a CIFSRF research team that is said to have demonstrated "how Canada, through private sector partnerships, could enable wide application of these results for development." At the same time, one respondent commented that, under the new administration in Canada, it is not likely that the same incentives will exist to try and engage Canadian MNCs when the focus will be on the least developed countries. Survey data suggest that most people are not able to judge whether results are relevant to MNCs. Those who agreed or strongly agreed that results generated by CIFSRF-funded research have successfully responded to the needs of the multi-national level private sector: 31.1%, not able to judge: 51.1%, disagreed: 17.8%, strongly disagreed: none. Those who agreed or strongly agreed that in the case of their own project, the results of research have been adopted by the multi-national level private sector: 22.2%, not able to judge: 51.1%, disagreed or strongly disagreed: 26.6%.

CIFSRF's experience thus far raises some of the tensions in considering private sector engagement in programs to address food security. By way of comparison, the UN International Fund for Agricultural Development (IFAD) (2014, p. 6), in writing about its own experience of private sector partnerships, has pointed to the enormous potential which private sector investment has for scaling up development interventions and reaching more poor people. But the agency also notes that, while it does partner with multinationals and big private corporations, in most cases they work with the local private sector – input suppliers, commodity brokers, warehouses, MFI and commercial banks – of smaller or greater size.

Private Sector Organizations in Partnerships

- In Phase 1, of the 19 projects (and 2 extensions) and 37 partnerships, none included private sector organizations as lead organizations. Over half of the organizations in the partnerships were universities (57%), followed by Non-Governmental Organizations (27%), government (13%) and other (including private sector) (3%). (Output 110.1).
- Some private sector organizations in Phase 1 were represented as third-party organizations (not clear how many exactly).

Outreach Efforts

Number of Interactions

Other efforts by CIFSRF are appeals to private sector audiences, as well as to the development community, in Phase 1. This is indicated by results for the Output 4.1.2.2 on the number of communications with other donors and support organizations, and with the private sector (Annex A to the CIFSRF final report).

Results show that 20 out of 21 projects (19 projects and 2 extensions) have had interactions with the private sector (and with development community) via inquiries, formal meetings, phone calls, or visits). There were a total of 33 interactions with the private sector broken down as:

- 18 in developing countries
- 8 in Canada
- 7 internationally

The extent of interactions with the private sector is nonetheless smaller than for the development community, showing a total of 43 interactions.

Number of Presentations

A second indicator is the number of presentations that have targeted both these groups as well. Presentations for the private sector audience total 305, broken down as:

- 196 in developing countries
- 67 in Canada
- 42 internationally

This compares lower than for the development community, which shows a total of 383, however, clearly, some of the events overlap in reaching both audiences.

Number of Research Outputs

A third indicator is the number of research outputs produced by all projects with the private sector as an intended audience: 299 vs. 424 for the development community.

Concluding Evidence from Phase 1 to Phase 2

By the end of Phase 1, the accumulated experience with private sector actors led to a higher prioritization for Phase 2 scaling up. The final report for Phase 1 states that, "Linkages with the private sector over the past year has [sic] been emphasized by the CIFSRF implementation team. An increasing number of projects have also indicated plans for targeting the private sector in various regions: 17 projects have focused on the private sector in developing countries, 7 have a plan for Canada, and 6 with plans for the private sector internationally." Results show that engagement with the private sector in Phase 1 has been largely exploratory.

Annex XIII.

Phase 1 Contribution to Thinking and Debates on Food Security and Agricultural Innovation

Introduction

In the evaluation TOR, one of the relevance questions for Phase 1 is, "How did CIFSRF Phase 1 contribute to thinking and debates on FS (innovation in agriculture"? In the course of the evaluation, we found that different stakeholder groups have different, and sometimes conflicting, views on the Fund's contributions to thinking and debates on FS and agricultural innovation.

Survey Results

The vast majority of all PIs (95% of Canadian PIs and 83% of those from DCs) agree or strongly agree with the statement, "CIFSRF-supported research for development has contributed to debates on food security innovation." However, whereas 62% of Canadian PIs strongly agree with the same statement, only 21% of DC PIs strongly agree with it. After the survey results became available, we did not have the opportunity to conduct follow up interviews with PIs to better understand their differing views on this topic, but as noted below, our stakeholder interviews throw some light on the subject.

Statements in Stakeholder Interviews

The stakeholder Interviews conducted for this evaluation provide information on the views of IDRC staff members, SAC and GC members, Canadian PIs, DC partners (including government officials), and professionals in the international agricultural research and development community who are not directly involved with the Fund. Representative quotes from members of these different groups are presented below.

Views of IDRC staff Members

- "There has been extensive publishing by the research teams, related to their areas of expertise ... Canadian Pl's have published papers, book chapters, special journal issues on their FS work and have presented it at conferences."
- "The Fund has contributed to the knowledge and debates in different regions."
- "We have 2 projects on livestock vaccines for neglected livestock. These projects have convinced GAC, Gates, and the CGIAR of the need to contribute more R4D funding... We have also shown that research does not need to take 25 years to make a difference! This has also attracted ACIAR (Australia) to partner with CIFSRF CIFSRF has been highly influential in FS thinking and practice in Canada and elsewhere. It has elevated academic efforts to support FS solutions that are marketable, useable, and valued CIFSRF is the only game in town, in Canada."

"Thinking in IDRC's Agriculture and Food Security Program has been revolutionized over the course of implementing the fund. We have been challenged to put things into a performance management framework. We have redesigned our Calls for Proposals. We have rethought how we evaluate and select projects, how we manage them, and how we communicate the results. We still haven't communicated our new "model," but I believe we have a model for how the CGIAR should work."

Views of SAC and GC Members

- "Participation in projects supported by the Fund has certainly helped academically oriented researchers appreciate the need to work with others to achieve practical results in the field."
- "The Fund does get debated a lot some of its successes it's in the back of our minds all the time."
- "It certainly is contributing in context of my team. Over several months we have been talking about food security strategy, in the context of research and innovation – it is contributing within global affairs for sure."

Views of Canadian Pls

- "Presenting the work on pulses in Ethiopia at scientific conference, dialogues and workshops. Participating in IFAD for a, 'getting the message out broadly to different groups.'"
- "The Food-to-Fork model developed in the CARICOM project is a novel approach that has caught the attention of many people, including high-level policy makers, in the region."
- "The project promoted the idea that fisheries are also an appropriate part of the agricultural-focused discourse on food security. This idea has become included in both the FAO and EU discussions of the topic."

Views of DC Partners

- "We are doing this [participating in debates on FS and agricultural innovation] a little bit. The opportunity exists but it has not been tapped enough. This is a question of maturity. We are not at the stage where we have the robust result to be able to influence things."
- "There is more discussion now on FS and agricultural innovation but maybe it is because I am deeply involved with the Kenyan project."
- "In India, the work on millet has stimulated interest in revitalizing this crop and promoting it as part of a FS strategy."
- "In Bolivia, the idea of working on fisheries within agricultural development has been influential."
- In St. Kitts, the project made people re-assess the main constraints to mutton production and the feasibility of supplying mutton for school lunches, versus supplying the market."

Views of Professionals Active in International Agricultural Research and Development¹

- "The team at IDRC ... is managing 20 disparate projects on all kinds of topics and they don't draw out and articulate the big-picture questions in agriculture ... Knowledge work has been my job for the last six years ... and there is no CIFSRF influence there. PAEPARD and US Feed the Future are great resources ... I would love to emulate that for Canada... One of the things they have done is create country-level dialogue to identify research priorities, and it works."
- "I didn't see anything terribly innovative."
- "Given what I've seen to date, I think they have missed the boat in not really looking through the broader lens of systems and resilience... Some of what I have observed I would hope it would not make its way into broader public policy."
- "I've never heard anybody in any country whether it's in Europe or in the Global South talk about CIFSRF..."
- "Please refresh my memory ... Oh yes, I remember hearing about it being established several years ago. But to be honest, I haven't heard anything since then."
- "On your question, I can't say that I have heard of the CIFSRF—not an acronym easily committed to memory. However, the issue is what have they funded (I don't often read the acknowledgements) and whether that in turn has had any impact. If you have a list, that would probably better help me comment on their contribution to current debates."

¹ These are views from people who do not work with the Fund, e.g. international consultants and staff of GAC, USAID, other innovation funds and NGOs.

Annex XIV. Phase 1 Likelihood of Continuing Results

Phase 1 Projects Receiving Phase 2 Support

Exhibit XIV.1 Phase 1 Projects Receiving Phase 2 Support

	Number of new projects per Call for Proposals (of total)	Number of new projects that went to Phase 2	Percentage
Call 1	3	2	67%
Call 2	10 (plus 1 extension)	4	40%
Call 3	6 (plus 1 extension)	6	100%
Totals	19 (plus 2 extensions)	12	12/19 = 63%

Reasons for Phase 1 Projects Not Receiving Phase 2 Funding

About 2/3 (63%) of Phase 1 projects received funding into Phase 2. While disappointing to project PIs and coordinators for projects that did not see this funding renewal, the reasons given by CIFSRF for not extending funding are multiple, touching on different aspects of projects, and overall, well-reasoned.

Of the 7 (of 19) Phase 1 projects that were not funded into Phase 2, in order of importance, the factors given in 'Project Completion Reports' are as follows:

- Unclear scale up focus (e.g. Project M);
- Evidence of significant partnership challenges (e.g. Project F);
- Management and leadership issues (e.g. Project D); and
- Contextual political issues (e.g. Project C).

These factors are compiled in Exhibit XIV.2 below.

Exhibit XIV.2 Factors for No Phase 2 Funding

Projects not funded into Phase 2	Scale up focus	Partnership challenges	Management and leadership issues	Contextual political factors	Source	Phase 2 funding
Project C	Moderate	None of note	Minor/Some	Political conflict	PCR	No (only extension)
Project D	Unclear	Major	Major	None of note	PCR	No
Project F	Unclear	Minor/Some	Minor/Some	None of note	Final Technical Report (PCR not available)	No
Project H	Unclear	Minor/Some	None of note	None of note	PCR	No
Project I	Moderate	Minor/Some	None of note	Political conflict	PCR	No
Project L	Unclear	Major	Major	None of note	PCR	No
Project M	Unclear	Major	Major	None of note	PCR	No

Legend: Mint green indicates a favourable characteristic; Light salmon indicates a minor to intermediate characteristic concern; Dark orange indicates a problematic characteristic.

Continuing Results and Benefits for Phase 1 Projects Not Funded into Phase 2

Of 19 projects funded in Phase 1, 7 did not receive funding into Phase 2. For these projects, available evidence from project 'Stories of Change' suggests that a number of results and benefits to beneficiaries have been reported, that challenges to maintaining these results and benefits are understood to be low, and thus results and benefits are likely to persist beyond Phase 1. Conveyed in Exhibit XIV.3 below, these results and benefits include:

- Valued economic developments (e.g. access to new markets);
- Improved food quality and safety;
- Improved management systems (e.g. distribution and marketing); and
- Some direct community benefits (e.g. increased income).

The table also contains a column that indicates how challenging the evaluation team understands it to be for these results and benefits to be maintained beyond Phase 1 funding.

Exhibit XIV.3 Continuing Results and Benefits

Projects	Valued economic developments	Improved quality and safety	Direct community benefits	Better systems	Challenge (level) of maintaining results and benefits	Likelihood of continuing results and benefits	Source
Project C	Oyster export development	New monitoring and testing	Fish rearing in seasonal reservoirs	Supply chain improvemen ts; New technologies (e.g. SMS)	Medium (based on global market integration and reliance on technologies)	Medium	Stories of Change
Project D	Greater food self reliance / sovereignty	Greater access to more nutritious and diverse food; new sources of protein	Highly productive home gardens	Women's participation in home garden management	Low	High	Stories of Change
Project F	Marketing groups developed	Indigenous chicken	Increased income for women	Experimenta tion with resilience enhancing technologies	Medium (based on challenges of collective organizing)	Medium	Stories of Change
Project H	Economically more efficient feed supplement		Increased income for farmers; Increased household milk consumption	Gender- sensitive and appropriate management systems	Low	High	Stories of Change
Project I	Economically more efficient fodder		Increased income		Medium (supportive systems may not be adequately developed/imp roved)	Medium	Stories of Change
Project L		Menu changes for schools	Increased fruit consumption of children; Learning from key health messaging		Medium (supportive systems may not be adequately developed/imp roved)	Low (evidence of recently renewed activity)	Stories of Change; Fieldwork

Projects	Valued economic developments	Improved quality and safety	Direct community benefits	Better systems	Challenge (level) of maintaining results and benefits	Likelihood of continuing results and benefits	Source
Project M	Increased market opportunities	Categoriza tion and promotion of improved potato varieties	Market development opportunitie s for farmers; strengthenin g of associations	Supply chain and marketing improvemen ts	Low (but Stories of Change document unavailable, and little quantitative data available)	Medium	PCR; Stories of Change was not available for this analysis

Legend: Khaki green (2) indicates a high likelihood of continuing results and benefits, despite non-renewal of CIFSRF funding for Phase 2; Rusty orange (4) indicates a medium likelihood of continuing results and benefits, despite non-renewal of CIFSRF funding for Phase 2; Bright yellow (1) indicates a low (but not non-existent) likelihood of continuing results and benefits, despite non-renewal of CIFSRF funding for Phase 2.

Annex XV. Phase 1 Additional Human and Financial Resources

Additional Financial Resources

The material in this section is drawn from Annex A of the Phase 1 Final Report (pp.30-31).

100.4 Complementary Funding Secured.

EXPECTED RESULTS	INDICATORS	TARGETS	
100. Improved capacity of Canadian-developing country partnerships to conduct applied research on food security issues (agricultural productivity and nutrition) and disseminate research outcomes in the developing world	100.4 Proportion of partners able to secure complementary funding during the project lifetime.	The majority of partners (50% + 1) were able to secure complementary funding at least once during the project.	Partially achieved

Indicator Evidence

13 of the **37** partner organizations (**35%**) in **11** of the **19** original projects (58%) secured additional funding for research activities during the life of the projects. This additional funding includes 47 grants for a total of **CAD \$ 3,972,276**. The totals only include funding secured as of the end of the projects, not applied for/pending of which there were several.

Source of the funding varies among partners. Canadian universities (U. Saskatchewan, McGill, and UBC) have secured complementary funding from other university funding sources (e.g. AUCC, Deans Scholarships, UBC Vitamin Research Fund, and NSERC). Developing country universities (Osun State University, Universidad Nacional de Colombia, and Universidad Nacional Agraria La Molina) have secured funding from private foundations and government organizations (e.g. Terre des hommesschweiz, FEDEPAPA, Fundacion Amigos de la Naturaleza (FAN) Bolivia). Other sources include international organizations such as IUCN, IRD, WWF (funding received by Asociación FAUNAGUA in Bolivia), private foundations (Proyecto +Suma, Janet Currus Foundation) and government (Grant Challenges Fund and Canadian Institutes of Health Research received by UBC; Instituto Nacional de Innovación Agropecuaria y Forestal (INIAF) received by Asociación FAUNAGUA), and the Indian Council of Agricultural Research received by the Tamil Nadu Agricultural University."

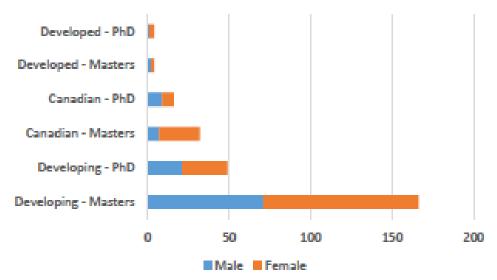
Additional Human Resources

The material in this section is drawn from Annex A of the Phase 1 Final Report (pp.61-62).

Accordingly, a total of 202 Masters students and 69 PhD students participated in Phase 1 CIFSRF projects, undertaking tasks that included but were not limited to data collection, data analysis, report writing, and grant writing.

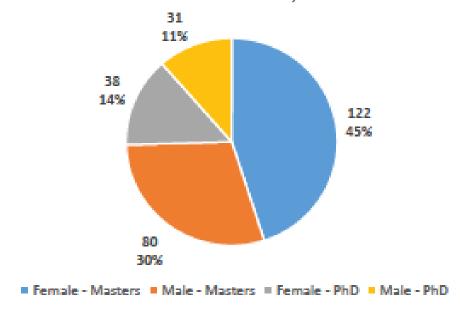
The diversity of graduate students working on these projects reflects the CIFSRF program's objectives of developing strong Canadian-DC partnerships.

Exhibit XV.1 Graduate Student Canadian and DC Diversity



Of 271 students overall, 48 were Canadian, 215 were from DC, and 8 were nationals of other developed countries (5 American, 1 British, 1 French, 1 Saudi Arabian) (see Exhibit XV.1).

Exhibit XV.2 Graduate Student Gender Diversity



A solid majority of these students were women (160/271, or 59%) (see Exhibit XV.2).

Annex XVI. Phase 1 Gender Equality

Strengths and Weaknesses of the Design and Implementation of the Fund's Gender Equality Strategy

In CIFSRF Phase 1, gender equality was one of two cross-cutting themes, and the evaluation concluded based on the analysis of data collected through several lines of evidence, that IDRC and Global Affairs Canada (GAC) have demonstrated a strong commitment to integrating gender equality considerations at all levels. A review of CIFSRF documents indicates that the evaluation grid for Concept Notes and Proposals included specific criteria for assessing gender equality. According to interviews with IDRC and GAC stakeholders, to ensure the integration of gender equality across CIFSRF projects, IDRC and GAC gender specialists were called upon to review shortlisted Concept Notes and Proposals and a gender specialist formed part of the Scientific Advisory Committee (SAC).

Yet, IDRC noted early on in Phase 1 that project capacity for gender equality analysis was insufficient and that project teams were not adequately integrating gender equality into project monitoring and reporting. Moreover, projects did not allocate funds for gender-related activities and many did not have a gender expert. Moreover, project teams felt that there were some missed opportunities for sharing experience around gender equality.

IDRC approved in May 2012 a gender strategy, whose objective was three-fold: 1) increase project-level capacity for integrating gender equality; 2) facilitate colearning and sharing among research teams in their respective experience integrating gender equality 3) document and disseminate gender outcomes from CIFSRF projects. IDRC dedicated CAD\$ 150,000 for the implementation of the gender strategy. Though all Program Officers were responsible for ensuring the integration of gender equality into their own project portfolio, two IDRC program officers took the lead in

The Kenya vaccine project: from gender-blind to gender-sensitive

According to a GAC Gender Specialist interviewed by the evaluation team, gender equality mainstreaming was considered irrelevant by PIs due to the nature of the project but, after the workshop, project investigators started seeing the different ways through which gender equality considerations could be addressed. As a result, PIs studied the gendered dimensions of cattle rearing; an activity performed principally by women farmers. Results from consultations among these women showed that this group did not feel comfortable using injections on cattle, and researchers are now exploring ways to manufacture the vaccine as a nasal spray."

implementing the gender strategy. IDRC also took steps to enhance the integration of gender equality at proposal stage by giving more detailed instructions to grantees in the second Call for Proposal.

With the objective of strengthening project capacities, IDRC conducted a series of gender workshops attended by project PIs. It was not possible for the Evaluation Team to fully assess the extent to which project capacities were strengthened as a result of the workshop, and IDRC staff noted that some projects had made more progress than others in integrating gender equality. Nonetheless, they also highlighted that the workshops helped program officers and project investigators better understand the strengths and weaknesses of different project teams. Overall, IDRC and GAC gender specialists consulted noted that project investigators gained a better understanding of gender equality dimensions, which resulted in a number of gender-blind projects becoming more gender-sensitive. Gender-blind at the onset, the Kenya vaccine project was often cited as a good example of this evolution (see textbox).

Less progress was made toward achieving the second objective of the gender strategy aimed at facilitating co-learning and the sharing of experiences among project teams. An attempt at creating a

network among similar projects (i.e. fisheries and aquaculture projects in Bolivia, Cambodia and Sri Lanka) was made but, according to IDRC staff, the network was not sustained. On a more positive note, the evaluation team found that most projects successfully reported on gender equality outcomes in the outcome stories resulting from the gender write shops organized by IDRC. The write shops also resulted in a positive unintended outcome: the book Transforming Gender and Food Security in the Global South is being published by Routledge and includes several chapters documenting CIFSRF gender outcome stories.

In the survey, 84% of PIs either agreed or strongly agreed that CIFSRF has an appropriate gender strategy. Seven percent was unable to judge.

Despite important progress made in integrating gender equality throughout CIFSRF, the gender composition of project teams remained a concern throughout Phase 1; 61% of researchers were men and only 39% were women.

Contribution to Improving Women's Decision-Making, Access to and Control of Resources

CIFSRF supported research targeting women small holders in development countries, with a particular emphasis on increasing women's access to income and resources, improving women and children's diets, and increasing women's participation and decision-making in agriculture.

Increasing Access to Income and Resources

IDRC reported that, in Phase 1, 16 projects developed a total of 70 innovations aimed to improved women's access to and control over income, an objective that is aligned with the third objective of Global Affairs Canada's Policy on Gender Equality. In the document review, which consisted of a revision of all outcome stories and qualitative information in Annex A of the CIFSRF final report, the evaluation team found evidence that CIFSRF contributed to increasing women's access to income through increased agricultural yields, value chain addition, and enhanced technical skills in more than half (10) of CIFSRF projects. In several of those projects, women also reported having increased control over the way in which they spend the income they earn, especially regarding the type of foods they buy for household consumption. In some projects, women also reported having used additional

Examples of income generation through increased yields and value chain addition

The story of change for CIFSRF project Nigerian women reap benefits from indigenous vegetables reports that with increased vegetable yields, marginalized Nigerian women increased their average yearly income from US\$ 1,994 to US\$ 3,376.

In **Bolivia**, women consulted through two focus group discussions (FGD; Yapacaní and Riberalta) testified that the project has taught them how to use fish remains to make and sell artisanal products such as curtains, purses, belts, wallets and notebooks. Women fish farmers in Yapacaní also reported having doubled their fish production since the beginning of the project. Further, some women beneficiaries reported being able to decide how they spend the income they earn; additional income was spent on children's education.

Data collected during two FGDs with women beneficiaries in **Cambodia** reveal that the CIFSRF project contributed to increased women's income generated from aquaculture and home gardening. Women further noted that they had more power than before in the way income in spent.

revenues for healthcare, children's education and to purchase household products (e.g. soap). FGDs with women beneficiaries indicate that CIFSRF projects contributed to increasing women's access to income in at least two countries (i.e. Bolivia, Cambodia) (see sidebar for examples).

In the survey, 80% of PIs either agreed or strongly agreed that CIFSRF-supported research for development contributed to improving women's access to resources. Sixteen percent was unable to judge.

Improving Women and Children's Diets

IDRC also reported that 17 projects developed a total of 92 innovations aimed at improving women and children's nutrition through a diversified diet. In outcome stories, several CIRSRF project teams reported increased nutritional benefits for women and their children as a result of increased yields and availability of diversified foods. In several countries, raising awareness campaigns increased women's

knowledge of the nutritional benefits of certain foods and training on food preparation taught them how to prepare nutritious dishes. Data from the outcome stories were triangulated visits, during field and women beneficiaries' perceptions largely corroborated information presented in the outcome stories. (see textbox below for examples).

Increasing Women's Participation and Decision-Making

In the final report for CIFSRF Phase 1, IDRC reported that 43% of farmers involved in testing innovations were women. As noted above, IDRC's PMF also tracked projects and innovations aimed at improving women's control over income, and the evaluation team found examples of contributions in this area. However, the PMF did not track how projects and innovations contributed to women taking decisions that are not linked to personal income. A few projects reported, especially through outcome stories, contributions increased decision-making productive assets and land management but this was not done systematically. For example, the outcome story for 'Better vegetable-

Evidence from field visits of increased nutritional benefits among women and their children

In **Bolivia**, the results of a survey on health and nutrition which revealed low fish consumption rates among local populations of the Northern Amazon Basin was used to advocate for the need to consume more fish. Women beneficiaries consulted during site visits in Yapacani and Riberalta testified that, as a result, they and their children have substantially increased their fish consumption. In Riberalta, some women also reported having opened their own restaurant thanks to the skills they acquired at food preparation training. In Yapacani, women reported that the introduction of polyculture in their fish tanks contributed a more diversified diet for them and their children.

In **Cambodia**, a PI noted that education around nutrition has led to increased understanding, especially among lactating and pregnant women, of the benefits of consuming fish protein — especially important for combating anemia, a major health issue among the local population. Women beneficiaries consulted during FGDs also highlighted that polycropping in home gardening resulted in increased availability of diversified vegetables in the community and that knowledge imparted by the project has enabled women to prepare more nutritious foods for their families.

In **India**, a FGD with women beneficiaries revealed that women learned how to make products including jams, jellies and pickles from mangos picked from the ground and previously wasted. They have reportedly introduced these new products into their diets.

growing opportunities for Nigerian women (106511) project' reported that women had started making decisions on land acquisition for vegetable production, credit sourcing, profit-sharing, and product pricing. During field visits, the evaluation team found that women in Cambodia were increasingly participating and taking decisions at the community level while women in Bolivia were starting to assume leadership positions in fish farmer and fishermen/women associations (i.e. APNI in Yapacani and ARAPAIMA in Riberalta). However, women beneficiaries consulted in Riberalta emphasized that, despite some progress, more needed to be done to make the voices of women heard in the community. No evidence of increased decision-making (aside from decisions over personal income) was found in the other countries visited.

In the survey, 73% of PIs either agreed or strongly agreed that CIFSRF-supported research for development contributed to improving women's relative power in their communities. Twenty-one percent was unable to judge.

Reducing Women's Drudgery

While not an objective of CIFSRF, IDRC tracked and reported quantitative data on the matter of reducing women's drudgery. IDRC reported that, in Phase 1, 13 projects and 45 innovations aimed to reduce women's drudgery in agriculture. Qualitative data from the document review indicates that technologies such as dehullers, iron plows and threshers have contributed to reducing women's workload in agriculture in two projects: 1) Reducing malnutrition in India's agri-biodiversity hotspots (106505); and 2) Increasing millet production in South Asia (106506).

Annex XVII. Phase 1 Environmental Sustainability

Distribution and Analysis of Projects Advancing CIFSRF Environmental Sustainability Priorities

The following Exhibit XVII.1 provides an at-a-glance perspective on the entire Phase 1 portfolio's environmental sustainability priorities and the extent to which these are advanced, drawing on 'Project Completion Reports' and 'Stories of Change' documents.

Exhibit XVII.1 Advancing Environmental Sustainability Priorities

Projects	Sustainable land management	Integrated water resources management (IWRM)	Protection and enhancement of biodiversity	Adaptation to and mitigation of climate change	Sustainable livelihoods	Source
Project A	2	0	1	1	2	PCR; Stories of Change
Project B	2	0	2	2	1	PCR
Project C	0	2	1	0	2	PCR; Stories of Change
Project D	2	1	2	1	2	PCR; Stories of Change
Project E	2	0	2	2	1	PCR; Stories of Change
Project F	1	1	1	1	2	Stories of Change
Project G	2	0	2	0	2	PCR; Stories of Change
Project H	2	2	0	0	2	PCR; Stories of Change
Project I	2	0	0	0	0 (potential negative effects flagged)	PCR; Stories of Change
Project J	2	2	0	0	2	PCR; Stories of Change
Project K	1	2	2	1	2	PCR; Stories of Change
Project L	0	1	0	0	2	PCR; Stories of Change
Project M	1	0	1	0	2	PCR
Project N	1	0	2	0	2	PCR; Stories of Change

Projects	Sustainable land management	Integrated water resources management (IWRM)	Protection and enhancement of biodiversity	Adaptation to and mitigation of climate change	Sustainable livelihoods	Source
Project O	2	0	2	1	2	PCR; Stories of Change
Project P	1	2	2	1	2	PCR; Stories of Change
Project Q	0	0	1	1	2	PCR; Stories of Change
Project R	0	0	1	1	2	PCR; Stories of Change
Project S	1	0	1	1	1	PCR; Stories of Change

Legend: Degree to which projects are located within, and/or advance the Fund's priorities on the four environmental sustainability considerations and principles articulated within the SEA: 2 = strong; 1 = moderate; 0 = low to non-existent.

As captured concisely in exhibit XVII.2 below, CIFSRF Phase 1 projects are most strongly situated to advance considerations and principles of sustainable land management, as well as the protection and enhancement of biodiversity.

Exhibit XVII.2 Considerations and Principles of Sustainability

	STRONG	MODERATE	LOW TO NON-EXISTENT
Sustainable land management	9 projects	6 projects	4 projects
Integrated water resources management (IWRM)	5 projects	3 projects	11 projects
Protection and enhancement of biodiversity	8 projects	7 projects	4 projects
Adaptation to and mitigation of climate change	2 projects	9 projects	8 projects

Legend: Number of Phase 1 projects located within, and/or advancing the Fund's priorities on the four environmental sustainability considerations and principles articulated within the SEA, and the degree to which this is the case.

On the matter of sustainable livelihoods, the data reveals that the vast majority of CIFSRF Phase 1 projects are well situated to advance this priority. Nonetheless, a few notable concerns have been raised. The project 'Agroforestry and sheep in Mali' was flagged in the PCR as having potentially detrimental environmental sustainability and livelihood implications, as per its Project Completion Report: « Les aspects environnementaux n'ont pas été étudiés. L'impact négatif de l'utilisation intensive des ligneux fourragers avant que la maitrise de leur production en régie ne soit assuré n'a pas été bien clarifié. » (p.9) This project would not go on to receive Phase 2 funding.

The sustainability of livelihoods benefits for the 'Nanotech for fruit' project were less evident in Phase 1 than for most other CIFSRF funded projects, and these remain to be seen. The same is true for 'Traditional grains in India' and 'Small millets in South Asia', notably with respect to gender considerations as related to livelihoods benefits. These last projects have received Phase 2 CIFSRF funding.

Illustrative Quotes

The following quotes are illustrative of the perspectives that have informed the analysis provided in the main body of the report. It highlights the perspectives of community-level project beneficiaries and developing country stakeholders in particular, though not exclusively.

- "There has been a very big environmental change but only for those involved in the project. There is a real constraint in terms of project scale. Before the project, there were no gardens and vegetables. But now, there are loads! Again, the impact of the project is beneficial to all but the most important impact is for those who are under the project. Before the project, I planted only a few vegetables, but since, and now, much more. The garden is taking up much more space! The project people get organic vegetables." Project Beneficiary
- "The fish counting and classification technique taught by the Brazilians to the Bolivians is not only useful to plan in terms of marketing the fish but also to maintain the ecosystem of the river. Paiche... is a species that was introduced naturally from Brazil. In other words, the fish invaded the Bolivian Amazon but this was not intended by humans. Paiche is a big fish that can have the potential to eat smaller fish and disrupt the ecosystem of the river. Now that fishermen know how many Paiche are in the river, they can plan to fish just the right amount so that it maintains the ecosystem, so that fishermen do not fish all the Paiche in the river but fish just enough to make sure that the Paiche does not overpopulate and disrupt the eco-system by eating too many of the smaller fishes." Project Beneficiary
- "The project saves the small indigenous species of fish. People use to kill these fish with pesticides, etc. Now, people are more familiar with the importance of fish in the paddy fields." DC National Authorities
- "Through double cropping they prolong the time in which the bare land is covered by crops, meaning less erosion. When you have more vegetation there is more sequestration and less CO2 emission into the atmosphere. Increased biomass and reduced or eliminated chemical fertilizer that could have ended up in river system or been leached from soil through run off. So in a way, it is climate smart because the technology is tuned towards that. I wonder if they have measured that. It has this climate smart component." DC National Authorities
- "Friendly with the environment and farming system reduces amounts of chemical fertilizers because of contribution of nitrogen fixing and residue which improves soil structure and fertility – it is very friendly for the environment." – DC National Authority
- "Government of Ethiopia already says every project should be friendly with the environment when project comes we evaluate environment. These nitrogen fixing projects are adding fertilizer to the soil without adding any chemicals on the crops, or other environmental disturbance on the crops. We are liking that. Very important thing is after this planting, we do other planting the nitrogen fixing crops are enough fertilizer in the soil." DC Sub-national Authority
- "Most positive is that project is working in pulses good for soil fertility, rhizomes are good for soil fertility. Good for improved package of seeds, date of plantation, soil management, fertilizer biological, value chain add good. Heard that farmers who participated have sold to food factory." External Stakeholder
- "This was strongly considered in terms of avoiding negative impacts, with potential to enhance positive dimension. Environmental guidelines were developed for the SAC." SAC Member
- "These cross-cutting themes are things the people who submitted Concept Notes and Proposals had difficulty getting their heads around... These are areas where the SAC made many suggestions for improvement, and IDRC worked with grantees during the Inception Phase of projects." – SAC Member
- "The cross-cutting issues were taken into consideration of course. But it is more difficult to assess them because you go in writing what the authors expected the reviewers wanted to see. It is very

difficult to judge the criteria. Nonetheless, the SAC was relied upon for cross-cutting issues, which we did and took very seriously. To begin with, the proposals were evaluated by individuals, plus extra homework. There were 3 reviewers for any proposal. They presented in writing their reviews. Then all remarks were compiled. Their views were presented to all verbally plus also included their written comments. Big discussions ensued, with lively debates. Any unresolved issues saw an appointment by the chair of two people to review the proposals again and then share their thoughts with the group. This was an iterative process. The whole SAC review process took 3 days. IDRC people were also a resource without breaching confidentiality. There were rich discussions on every proposal. This was time-consuming and rigorous before and during the SAC process." – SAC Member

- "Including such things as gender and environmental sustainability among the criteria for evaluating proposals was very positive, as it made many researchers think about these things for the first time." – GC Member
- "IDRC always asking how much our work is contributing to the environment if against environment – no funding from CIFSRF – always questioning – they give priority to the environment." – DC PI
- "An Environmental Assessment was undertaken before project implementation for the ponds and for irrigqation. Environmental education was also pursued with respect to issues of the distance required between ponds and toilets. This was good and impactful. There are now more plants and vegetables around people's homes. People and water consumption, sees people more efficient and with less water loss. Plastic bag control has been improved." DC PI
- "We have developed systems whereby we ensure that at the end, whatever we used have been disposed off properly." – DC PI
- "The proposed model of fisheries is environmentally sustainable. Through the 'counting Paiche' technique, it is possible to know how many Paiche (male/female) are in the river. This way, you make sure that you do not fish too much to disrupt the ecosystem. At the same time, you fish enough Paiche to make sure that this introduced species does not disrupt the ecosystem by eating the other fishes. In other words, the studies undertaken by the project in the fisheries component have the objective to establish the "maximum sustainable yield". But the productive capacity must also be taken into consideration, so therefore fishermen maybe will not be able to fish the 'maximum sustainable use'. Then fish monitoring is importing to know how much fish was taken out during the year. (Capacities were provided by the project to monitor and report data on the fishes that were caught. The project supported a realtime monitoring and reporting system using cell phones. The system is functioning in Trinidacito but not in Riberalta. Fishermen started using the system in Riberalta but this was not sustained, especially because of lack of resources." DC Partner
- "The technology for component vaccine is extremely environmentally friendly. Set of antigens used are produced in industrial setting. No potential transfer of genes. This leads to reduction of antibiotic use." – Canadian PI
- "The project contributed to knowledge on generating improved, environmentally responsible, livelihoods from the fish value chain for female entrepreneurs (small-scale businesses fostered) and fishing communities (community-based fish processing plant; fish quality and economic planning for fishing with lower income communities)" Canadian PI

Annex XVIII. Phase 1 Efficiency: Program Management

Overall, the perspective of surveyed stakeholders is that CIFSRF is efficiently managed, as shown in Exhibit XVIII.1 below. 40 of 44 respondents (91%) agreed or strongly agreed that CIFSRF was efficiently planned and 42 of 44 respondents (95%) agreed or strongly agreed that CIFSRF was efficiently delivered.

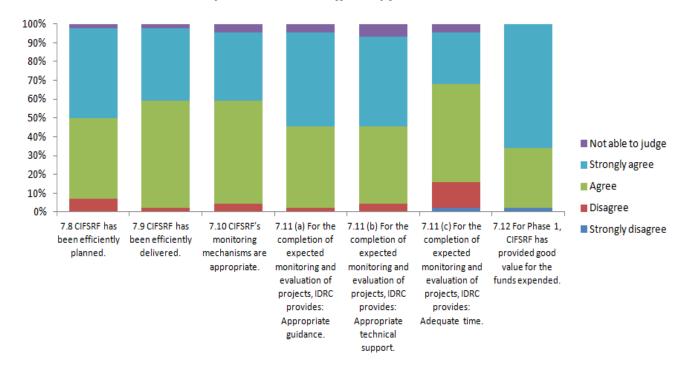


Exhibit XVIII.1 Universalia Survey Data on CIFSRF's Efficiency for Phase 1

The following analysis elaborates further on key elements of CIFSRF's efficiency, notably: 1) the use of CIFSRF resources and IDRC's delivery of the program on time and on budget, 2) CIFSRF monitoring and evaluation, 3) the Call for Proposals mechanism and 4) CIFSRF's main strengths and weaknesses.

Use of CIFSRF Resources on Time and on Budget

In Phase 1, IDRC was able to deliver CIFSRF within the overall budget and disburse the research grants within 6% of the allocated funding. Disbursements for Call 1 projects reached 95.2% (\$2.8 million) of the original allocations, while Call 2 projects reached 94.6% (\$30.3 million) and Call 3 reached 94.6% (\$16.5 million). A significant factor in the remaining under-spending was currency gains, due to the changing value of the Canadian dollar. The main concern for the CIFSRF Program with regards to the efficient use of CIFSRF resources was the understaffing of the program. As shown in Exhibit XVIII.2 below, for the first four years of CIFSRF, only two full-time staff were employed to manage the 19 projects (and 2 extensions) for which approximately \$44.6 million in funds was disbursed. In 2013, an additional staff member was brought on-board. However, during this period, Phase 2 was beginning, for which an additional 18 projects were funded with approximately CAD 56.9 million.

Exhibit XVIII.2 CI	FSRF Staffing	in	Phase .	1
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CIFSRF Staff/Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Junior & intermediate staff & part-time/full-time	1	1	1	1	1	1
Senior staff & part-time/full-time	1	1	1	1	2	2
Total	2	2	2	2	3	3

CIFSRF staff reported often working overtime, nights and weekends to meet deadlines and cover the wide ranges of responsibilities for managing the CIFSRF program. Beyond the contributions of CIFSRF staff, time from additional IDRC staff was more than double the projected number of days, with at least 1072 days worked instead of 500 days over the 2009-2014 period. IDRC Peer Reviewer days were significantly less than projected, with 40 days instead of 200 days. The investment of staff time was particularly heavy in Year 2 of Phase 1, during which project applications were being reviewed as a part

of the Call for Proposal process, where non-CIFSRF staff worked 339 days, rather than the 100 days planned. These figures do not include senior management staff time, the additional 10-20% that IDRC estimates was provided 'in-kind', or the support provided by other teams within IDRC (non-AFS) and select GAC staff that assisted with reviewing proposals. Based on numbers above, estimated staff time was at least 2.5 times higher than projected: 1072 days over 5 years, for an average days/year = 214.4, 20% additional time = 32 days, approximated average 257.2 days instead of 100 days per year. This is likely underestimated.



"IDRC resources have been used very efficiently – dedicated staff on the project... Much of the success of achievements of the initiative to this point in time is because IDRC has been able to dedicate resources to accompany grantees to make them as successful as possible."

GAC Staffperson



To cover the cost of additional human resources, funds were reallocated from the budget lines for Research Expenses on Honoraria for External Peer Reviewers and IDRC Peer Reviewers.

Although the partnership between GAC and IDRC has led to innovation within IDRC, in particular significant learning on using a PMF, the accountability requirements applied to CIFSRF because it is funded by GAC have led to inefficiencies. IDRC and GAC staff reported that IDRC's processes were more efficient that those of GAC. For example, in Phase 1, IDRC had to seek several levels of sign-off from GAC, including approval by the Minister responsible for GAC for project announcements. IDRC staff reported that the administrative and reporting requirements to GAC resulted in high costs to IDRC, specifically in terms of staff time required.



"[IDRC] processes for approval in governance, management, concept notes to full proposals were very efficiently managed. Much more efficiently managed than we do here at GAC. Much more streamlined right across the board – less levels of bureaucracy – less sign offs required. On our end, at time CIFSRF Phase 1 was approved – every project approved had to go up to the Minister for approval."

— GAC staff member



In interviews, country reports and the survey, the most cited weakness of the program was the short timelines, in terms of long delays from application to approval, short timelines for implementation of projects and high requirements for M&E taking too much time. In the evaluation survey, 7 of 44 respondents (16%) indicate that IDRC did not provide sufficient time for M&E, although this is nowhere near a majority, this was the most negatively scored question on CIFSRF efficiency. In addition, 23 of the 42 respondents that

provided weaknesses or areas of improvement in the survey comments, listed the short, rigid timelines as one of the three main weaknesses of CIFSRF. The majority of interviewed stakeholders both within and outside IDRC noted that the timelines were very short for project delivery and that the lack of flexibility of timelines caused issues for delivering results. Stakeholders in Ethiopia, Kenya and India all noted that the project start date did not match the local crop cycle, resulting in delays for on the ground implementation, combined with the inflexibility of project dates, provided a challenge for projects to deliver results and meet expectations. As a result, extensions had to be granted to Ethiopia and Sri Lanka (\$400,000 per project over 13 months). However, stakeholders also commented positively on the benefits of operating with short timelines. Further, the timeline pushed project selection towards those with functioning and established partnerships. Stakeholder both within and outside IDRC noted that CIFSRF has achieved remarkable results given the time and resources available to the program.

Monitoring and Evaluation

CIFSRF's transition from Excel-based reporting to online reporting significantly reduced the burden on CIFSRF staff, increased the quality of the data received and allowed CIFSRF to provide more regular information on program performance. The timelines impacted stakeholders' perspective of monitoring and evaluation. 8 surveyed stakeholders noted that the M&E approach was a main strength of the program, and 14 indicated it was a main weakness of the program. Those who cited it as strength of the program emphasized the rigorousness and improvement throughout Phase 1. Whereas amongst the respondents who cited CIFSRF's M&E as a weakness, the reporting was considered too frequent and time consuming given the short time period for project implementation.

Call for Proposals

The Call for Proposals process was implemented by IDRC with an adaptive management approach. Through iterative changes between the simultaneous launch of Call 1 and Call 2, and the subsequent launch of Call 3, CIFSRF created and implemented systems to manage the Calls and noted a progressive increase in the quality of Proposals received from CIFSRF's various target audiences. The number of potential projects reviewed in each Call is listed in Exhibit XVIII.3 below.

Exhibit XVIII.3 Phase 1 Call Project Proposals and Selections

CALL 1	CALL 2	CALL 3
19 Proposals, 7 shortlisted, 3 selected	275 Concept Notes, 72 shortlisted, 21 Proposals, 10 selected	236 Concept Notes, 46 shortlisted, 15 Proposals, 6 selected

Although CIFSRF was able to successfully disburse 96% of its funding in Phase 1, the Call for Proposals process required significantly more human resources than CIFSRF had planned and budgeted. Document review indicates that Call 1 was perceived as having a lack of strong Proposals, which required heavy support from IDRC POs to Proposal teams. The use of a 'one step' process (not including a Concept Note), also increased the resource intensity of providing support to Proposal teams. Both Calls 2 and 3 used the two-step process, and program document report that this improved both the quality of potential projects and collaboration between IDRC and GAC.

Following Calls 1 and 2, IDRC staff analyzed the geographic and organizational coverage of submissions received using both the applications and analytics on the CIFSRF site (e.g. downloads by region, page visits, etc.). Call 3 was designed to fill in the gaps from Calls 1 and 2. A 'best practice' note was also circulated to POs for Call 3, to enhance the quality of Concept Notes. In Call 3, CIFSRF adapted further, adding an online application, expanding the eligibility of international organizations and investing even further in pre-screening and shortlisting Concept Notes prior to submitting them to the SAC. Thematically, document review and interviews indicate that the GC and the SAC noted that projects in

Call 3 were more focused and innovative than in Call 2. This suggests that the change in selection criteria, removal of 'potential thematic research themes' in the Call documents, and improved clarity with respect to expectations for innovative research led to more risk-taking and innovation by researchers.

Strengths and Weaknesses

The strengths and weakness of CIFSRF's management, identified through interviews and the survey are noted in Exhibit XVIII.4 below. The evaluation team has categorized the strengths of CIFSRF by People, Processes and Program-related strengths. The weaknesses have been classified by level of urgency, from significant area of concern to low area of concern.

Exhibit XVIII.4 Strengths and Weaknesses of CIFSRF Management

CATEGORY	STRENGTHS IDENTIFIED BY RESPONDENTS IN INTERVIEWS AND THE SURVEY
People	 Staff are committed and hard-working IDRC staff sourced additional resources within IDRC to be able to deliver outputs on time The majority of implementing partners found IDRC staff to be collaborative, supportive and to communicate regularly CIFSRF has provided adequate and appropriate support to partners to conduct project level monitoring and evaluation Strong support for project development
Processes	 Call for Proposals process implemented with adaptive management approach, highlighting iterative changes, noting a progressively increased quality of Proposals from target groups CIFSRF has integrated learning on program management (e.g. M&E) and improved processes over time New systems and procedures developed for CIFSRF have been taken up more widely in IDRC (e.g. Call process, SAC, GC, PMF)
Program	 CIFSRF has delivered significant results given the limited resources available Outputs were delivered on budget and on time, with the exception of several brief project extensions Courage to fund 'cutting-edge' projects and test new methods

URGENCY WEAKNESSES IDENTIFIED BY RESPONDENTS IN INTERVIEWS AND THE SURVEY Significant Insufficient human and financial resources Concern Insufficient resources resulted in significant stress on staff • Expectations too high given short timelines, partners reported negative effect on projects Concern RBM approach not ideal M&E vehicle for R4D (reporting based on predetermined categories, goal displacement, focus on quantitative outputs, lack of structure for broader learnings, inherent uncertainty of research) • Approach has favoured investments in learning and adaption in terms of program management over / as compard with research for development learning · Lack of resources in both IDRC and GAC to reflect, analyse, uptake and share lessons from CIFSRF Frequency and detail of reporting requirements considered significant burden by some implementing partners, particularly academics

URGENCY	WEAKNESSES IDENTIFIED BY RESPONDENTS IN INTERVIEWS AND THE SURVEY
Low Concern	• Difficult for some project teams to manage M&E, communications, political advocacy, gender and scaling up— they may not be experts in all subjects
	Staff turnover has affected continuity and communication for some implementing partners
	• Lack of widely shared definitions for some key terms (e.g. 'private sector', 'innovation', 'technology', 'governance', 'applications', 'solutions')

Overall and on balance, the CIFSRF program was positively perceived.

CIFSRF Program Expenses

During interviews, CIFSRF stakeholders suggested that the evaluation team examine the efficiency of the Call for Proposal models, with regards to the program's overhead and administrative costs. However, the Proposal review process is not considered an administrative cost, but rather a programming costs. Exhibit XVIII.5 below provide a breakdown of CIFSRF expenses per year. CIFSRF complies with the GAC requirement that indirect/overhead costs, "costs that cannot be obviously traced to a specific program/project," remain below 12%. As noted in Exhibit XVIII.5 below, the administrative cost recovery for CIFSRF has been below 8% each year of Phase 2. In addition, the total funding disbursed purely in research grants, during Phase 2, as of the writing of this report, is 86% of the total expenses. This indicates that CIFSRF is running a very lean and efficient program in terms of their ability to disburse funds with a low overhead.

Exhibit XVIII.5 CIFSRF Phase 1 Expenses Per Year

Expenses/Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Expenses for funding disbursed (research grants)	0	5,067,021	11,736,718	11,200,889	15,399,691	13,539,845
Expenses for other programming costs (e.g. peer review, research network development)	0	96,162	148,507	208,167	354,851	692,593
Grand Total	0	5,163,183	11,885,225	11,409,056	15,754,542	14,232,438
Expenses/Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Salaries and Benefits (IDRC and GAC)	37,347	294,296	326,786	289,726	458,121	646,698
Office Costs (IDRC and GAC)	5,159	21,609	26,186	28,476	30,836	44,783
Monitoring and Evaluation (IDRC and GAC)	0	24,976	42,718	202,825	129,874	191,093
Communications and Dissemination (IDRC and GAC)	2,419	20,623	18,164	14,941	18,952	52,573
Phase 1 Total	44,925	361,504	413,854	535,968	581,740	513,215
Phase 2 Total					56,043	421,932
Grand Total	44,925	361,504	413,854	535,968	637,783	935,147
Admin costs/Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Administrative cost recovery	3,594	441,975	983,926	955,602	1,314,712	1,205,809
Percentage	(7.4%)	(7.4%)	(7.4%)	(7.4%)	(7.4%)	(7.4%)
Phase 1 Total	3,594	441,975	983,926	955,602	1,293,093	585,078
Phase 2 Total					21,619	620,731
Grand Total	3,594	441,975	983,926	955,602	1,314,712	1,205,809
Grand Total EXPENSES	48,519	5,966,662	13,283,005	12,900,626	17,707,037	16,373,394

Annex XIX. Phase 1 Efficiency: Governance Arrangements

Strengths of the Scientific Advisory Committee

This relates to evidence on the finding that the SAC is considered efficient and of high-caliber expertise. The diversity of expertise is an attribute but at the same, may need to be even broader than it is to match the diversity of concepts and content in the applications.

- From the pool of key informants, there were 12 positive mentions of the SAC (two of whom were from SAC members) and two mentions of weaknesses.
- The scientific examination and assessment is a fairly comprehensive process that draws on expertise and an external is consulted when there are gaps. Every proposal is reviewed by a set of three people and if there is not satisfactory expertise, the SAC looks outside for it.
- Some members of the SAC had to be replaced in the first phase, after which the composition has demonstrated high-caliber of people (two key informants).
- According to key informants, the functioning and efficiency of the SAC to complete its tasks, which have been very demanding, has been very good. One SAC member remarked, ""this is the most systematic and rigorous panel of any that I have participated in with respect to rigour, seriousness, process that was developed that we went through."
- It has been very useful to have the two organizations IDRC and GAC co-chair the SAC to ensure shared understanding and accountability.
- In the assessment of the evaluation team and based on their experience, having a committee rather than hiring out proposal review to external consultants provides some continuity and efficiency in having the same people over a period of time who understand the Fund and its objectives. This is evident in the functioning of the SAC.

Weaknesses / Areas of Improvement of the SAC

- The SAC does have a diversity of members that includes consultants from developing regions; however, it is observed that the SAC has had neither food security expert from the Global South nor representatives from beneficiary groups which would seem appropriate, given the wide range of developing countries / contexts from which proposals are submitted. As one SAC member noted, "sometimes proposals required a lot of homework from SAC members to understand the content, so expanding the SAC might be required to account for diversity."
- (The demand for a wide range of experience on the SAC is evident in the volume of submissions responding to an open Call. With such a wide range of organizations applying, it is critically important for SAC members or reviewers to feel confident that the grantees are able to manage large sums of money. SAC members alone were not able to assess the capacity of all the institutions. This precipitated the support of internal reviews of proposals by IDRC Program Officers and GAC regional staff, as well as reviews of applicant organizations by IDRC's Regional Controllers. This information was provided to the SAC, as needed, to assist in their review of proposals. It was also useful to the Governance Committee in the selection of recipients (CIFSRF 1st Annual Progress Report to CIDA, p. 26).

- While the SAC is co-chaired by GAC and IDRC, one respondent felt that GAC needed to be more engaged than it is.
- The gender balance on the SAC was 8 men to 3 women, which is not a good reflection of gender equity.
- Technology assessments, which may fall within the purview of the SAC, are noticeably absent and could be a significant risk to the Fund.

Strengths of the Governance Committee

The information here is based on interview data. This relates to the finding that differences of opinion emerged in the effectiveness or value added of the Governance Committee. However, given the bureaucratic requirements of GAC, having high-level executives on the Governance Committee proved useful.

- Drawing on key informant interviews, there was an equal number of six mentions of strengths (of which three came from GC members) and six mentions of weaknesses pertaining to the Governance Committee.
- Most respondents from GAC and IDRC felt the co-chairing by both organizations was productive; it lends strategic oversight by both partners, ensures policy coherence, and assures accountability to cross-cutting issues.
- One respondent and member of the GC noted that it was "the most well run executive committee
 in which I have ever participated." IDRC has been especially satisfied with the governance
 arrangements. This reflects well on the quality of the relationship as it has evolved with GAC.
- Three respondents also felt that the high level representation on the committee initially raised concerns of micro-management and trust issues, but it turned out to be very useful, ensuring high visibility of CIFSRF and more efficiency in overcoming bureaucratic roadblocks. In their view, the partnership has evolved positively and has helped GAC staff to be more engaged. As such, this is more a strength than a weakness.

Weakness / Areas of Improvement of the Governance Committee

There were respondents who expressed less sanguine views or concerns about the Governance Committee. These are articulated below:

- A few respondents felt that the Governance Committee membership was not addressing the big picture questions nor the strategic policy questions for GAC. Some felt this came as a result of having only high-level bureaucrats as members. Others felt the Committee lacked diversity -- people from the Global South, from civil society, the trade sector, and private sector -- to raise the critical questions appropriate to innovations, scaling up, and the contexts in which they take place.
- Having beneficiaries represented at governance level is recognized by the evaluation team as an important diversity issue for the GC. To that effect, it may be of interest to take note of the United Nations Committee on World Food Security (CFS), which has a self regulated civil society mechanism equal to private sector and academic mechanisms (with direct access and equal voice in inter-governmental negotiations, structures, etc). It is consistently assessed as highly successful, with the Secretary-General recommending it as a model for inclusivity to the UN as a whole. Scales/functions are not comparable, yet insight may still be gleaned.

- Procedures for the fund ensured accountability with proper monitoring and evaluation and financial reporting. But the accountability / reporting to GAC has been noted by several respondents as excessive, cumbersome and overly bureaucratic. Respondents erred more on the side of criticism of the government requirements, noting as well that the expectations from GAC made it difficult for IDRC and created tensions for both organizations.
- In terms of gender balance, in Phase 1, there were 9 male members and 2 female members. Cochairs are male. However, there is no information available on discussions that might have taken place on the gender balance of the GC.

Strengths and Weaknesses of the Governance Arrangements in General

This is in relation to the finding that the governance arrangements have been appropriate to the Fund and favourable to the relationship between the two partner organizations.

- Of 33 key informants, there were 11 positive mentions on governance in general.
- There were 7 comments on the structure and all felt that it worked well. The two-tiered structure of having a consultative Scientific Advisory Committee that makes recommendations to a decision-making Governance Committee is supported by most respondents, indicating satisfaction with the roles that they played. It provides the right balance between the GC that furnishes the operational and application side and the SAC the scientific rigour. In the words of one interviewee: "Global Affairs Canada benefits from IDRC people, given that GAC's experience is limited scientifically. IDRC people are the real experts."
- The GAC and IDRC managers who sit on both committees play a bridging role and builds a strong relationship between the two committees. The relationship between the committees and the management team is said to be excellent and compliments are given to the timeliness and quality of the materials produced by the committees.
- On the whole, IDRC has been a productive and effective player in preparing the committees for proposal review. Comments made directly about IDRC management (N=6) were favourable, none unfavourable. IDRC implements the CIFSRF and hosts the SAC meetings. IDRC staff pre-screen Concept Notes and Proposals for completeness and eligibility. IDRC then prepares basic summary information relating to the proposals and identifies any proposals that fail to meet mandatory criteria and notifies the co-chairs of these files. This information is then made available to the Governance Committee. This has been noted to be efficient (but as pointed out in the Management section, the management burden on IDRC is also not sustainable.)
- Several respondents said that having both GAC and IDRC on the GC was important and valuable, but it does not ensure that people in GAC are properly informed about what is going on with the Fund. Concerns were raised over communication between IDRC and GAC and also within GAC. These were presented as hurdles to scaling up CIFSRF innovations. A larger number of comments referred to the onerous administrative requirements of GAC and a difference in bureaucratic cultures between GAC and IDRC that made communication between the two difficult. However, effective communication requires resources and time for the messaging to be accomplished and results to be taken up in GAC development programming.

Annex XX. Phase 2 Increased Use of Canadian Expertise and Knowledge

Use of Canadian Expertise and Knowledge as Reported by CIFSRF

The following data speaks to 'CIFSRF's Intermediate Outcome 1. Increased use of Canadian knowledge by developing country researchers'.

"The Phase 2 projects include 26 developing country grantees that are using resources from CIFSRF to conduct research. In addition, the projects involve in the research 55 third party organizations in developing countries.

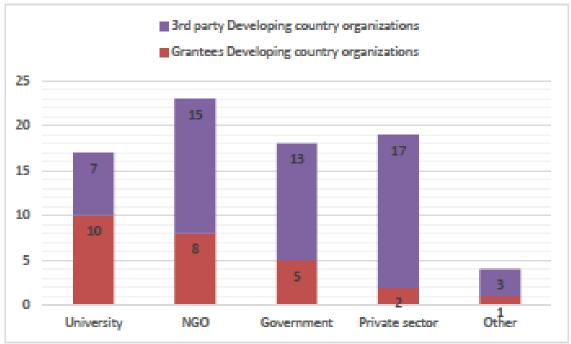


Figure 2 Number of research organizations in developing countries

Source: Annex A CIFSRF 3rd Annual Progress Report Toward PMF 2016, p.9

The following passages provide examples of the Canadian contribution to CIFSRF research partnerships.

"CISFRF requires that Canadian knowledge and organizations substantively contribute to improving food security. Overall, Canadians and their know-how are contributing significantly to project implementation. Some examples of evidence of the Canadian-value added in the partnerships:

The project in Nepal (107791) has enabled new or expanded partnerships between Canadian researchers and researchers in Nepal at various public institutions (LI-BIRD, NARC), and between the Canadian team and the private sector in Nepal (Anamolbiu) and Canada (Plant Products Inc., XiteBio rhizobial company).

- The Amazon for fish food project (107985) ran an exchange between Bolivian and Canadian technicians, which were seen as a key opportunity for bilateral feedback of experiences and knowledge. The exchange also is providing opportunities for establishing relationships with social impact financiers and microfinance investment vehicles, such as Oikocredit Canada and the Canadian Executive Service Organization (CESO-SACO).
- Researchers in Côte d'Ivoire and Ghana from the project, Fighting lethal yellowing disease for coconut farmers (107789) benefited from hands-on training on the installation, software management, and data management and laboratory equipment at both the Marc Delorme Research Station and Université Nangui Abrogou in Côte d'Ivoire. Instructors from the Canadian grantees, Sporometrics, provided training on the basic methods for the field identification of CILY symptoms and laboratory identification of the CILY phytoplasma. A training program was also provided at the University of Toronto for a hands-on training on cutting-edge research technology for phytoplasma.
- Graduate students are benefiting from Canadian world class scientists and university facilities to build their career capacities:
 - Two researchers of Nepalese origin are obtaining their PhDs in Canada (107791)
 - Tanzanian and Canadian students presented project data from their doctoral thesis at the Canadian Conference on Global Health in November 2015 and will also present at the Micronutrient Forum in October 2016 (107790)
 - A total of seven young Ethiopian researchers are being trained for PhD and MSc studies at the
 University of Saskatchewan. As occurred in the three previous projects, it is expected that
 these young Ethiopians trained through this project will be actively employed in industry,
 international organisations, extension, research and teaching, and in positions of influence
 (107984)." (see Draft Phase 2 Third Annual Narrative Report, p.39).

Annex XXI.

Phase 2 Improved Developing Country Organizational Capabilities to Conduct Applied Research

Reported Organizational Capabilities

The evaluation team interviewed Phase 2 project PIs and collated relevant material into the following Exhibit XXI.1, as per CIFSRF priorities. Doing so allowed us to provide the analysis for this section of the report.

Exhibit XXI.1 Reported Changes in Organizational Capabilities

Meaningful change in their organization level capabilities to:	Develop and test solutions	Design and compare scaling up approaches and/or models	Achieve impacts at scale	Develop and apply strategies to inform policy	Co-manage multi-partner research initiatives	Communicate and disseminate results
Project MM	Cdn: learned about tropical agriculture DC: technical training through Canadian partner	Cdn: none noted DC: visions for expansion given success; work with government (e.g. Health Bureau) to expand project in P2	Cdn: none noted DC: bring in the private sector, link to farmers; bring pulses to new areas	Cdn: none noted DC: exploited links to Ethiopia national agriculture system	Cdn: none noted DC: strengthened a pre-existing partnership; fostered new partnerships (e.g. with Farm Radio International)	Cdn: none noted DC: discussing legume platform at national level, working with many actors; established regional platform of pulses
Project QQ	Cdn: none noted DC: local students trained in survey research and extension work; research identified best areas for fish exploitation	Cdn: undertook "scaling-up" testing with various indicators; this project led to similar UBC project in Bangladesh DC: strategically chosen scale- up model, based on successful P1 experiences	Cdn: none noted DC: domino effect strategy for capacitating farmers (farmers who receive training train others); development of financial tools for fisheries/acquaculture; strengthening market access	Cdn: none noted DC: attempt to turn parts of project into national programme	Cdn: none noted DC: worked jointly with many partners from various backgrounds	Cdn: none noted DC: collaboration with mayor for knowledge-dissemination

Meaningful change in their organization level capabilities to:	Develop and test solutions	Design and compare scaling up approaches and/or models	Achieve impacts at scale	Develop and apply strategies to inform policy	Co-manage multi-partner research initiatives	Communicate and disseminate results
Project PP	Cdn: Learning for Canadian PhDs and MAs DC: gained better understanding of importance of research and research protocol; coaching from Canadian partner	Cdn: introduced cost-sharing model in P2 DC: used lessons from issues in P1 to design P2; changed approach from RCT to giving choice to farmers	Cdn: none noted DC: link project to National Health Program; government has plans to expand to 25 provinces gradually	Cdn: none noted DC: close ties to Ministries via Project Steering Committee; project influenced national food security policy	Cdn: none noted DC: good division of tasks amongst partners; also, HKI developed rigorous M&E system	Cdn: sharing of results in Cambodia DC: sharing of results with government and communities; ties developed
Project GG	Cdn: none noted DC: significant training for vaccine-development received (incl. staff trained in Canada); Canada shared IP and IP rights	Cdn: none noted DC: partnerships with regional organizations	Cdn: none noted DC: improved lab, ready for commercial production, is needed	Cdn: none noted DC: none noted	Cdn: none noted DC: good learning from variety of partners; collaboration with other African researchers (e.g. in South Africa) strengthened	Cdn: none noted DC: none noted
Project II	Cdn: filing of a US patent DC: one patent, and developed potential for 9 products (but needs more help filing patents)	Cdn: none noted DC: IDRC-provided tools and methods to think about scaling; testing Hexanal on new fruits	Cdn: none noted DC: aim to go to market soon; IDRC investments expanded HR and research capacities	Cdn: none noted DC: none noted	Cdn: none noted DC: vertical integration of research and development organizations	Cdn: none noted DC: partner with private sector to disseminate; also, knowledge transfer from big to small farmers, and use of 'model farmers' to advertise message
Project HH	Cdn: none noted DC: "mutual beneficial partnership" (details not specified)	Cdn: none noted DC: scale up plan designed, with 'Canadian' help	Cdn: none noted DC: internal changes, establishment of new corporate structure	Cdn: none noted DC: none noted	Cdn: none noted DC: vertical integration of research and development organizations	Cdn: none noted DC: Canadian small companies helped with communications, filming, and data analysis.

As per Annex A of the Third Annual Progress Report of CIFSRF (pp.16-17), "48% of the grantee organizations (20 out of 42) say they have gained skills in project management, 60% (25) gained skills in informing policy, 57% (24) in impact at scale, 62% (26) in developing scaling up models and 55% (23) in food security research."

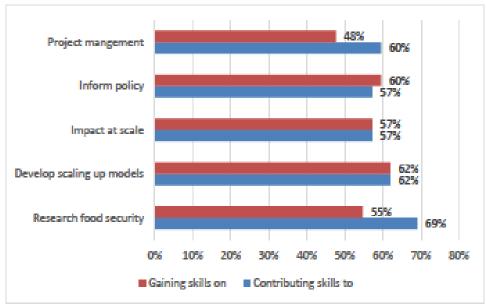


Figure 6 Percentage of organizations contributing and gaining skills to the partnerships

Source: Annex A CIFSRF 3rd Annual Progress Report Toward PMF 2016, p.17

While this assessment of capacity improvement is based on both self-reporting, interviewing and a survey, a more comprehensive assessment of capacity-building and capacity improvement could certainly be undertaken; it is however beyond the scope of the current evaluation. Insights on the planning, implementation and monitoring of capacity development are available in the following publications: Horton, D. (2011). 'Evaluating capacity development' in *Capacity.org* Issue 43, pp.5-9; Horton, D. (2002). 'Planning, Implementing, and Evaluating Capacity Development' in *ISNAR Briefing Paper no.50*, pp.1-8.

Annex XXII. Phase 2 Improved Ability of Developing Country Organizations to Implement and Support New Food Security Solutions

Introductory Note

The main source of systematic information on progress toward planned targets for Phase 2 is Annex A to the Third Annual Narrative Report (April 1, 2015 – March 31, 2016).

Progress Toward Output Target as per PMF

The Fund has a single output indicator for Phase 2: the number of "units of the solution" that have been delivered/made available for purchase or free-of-charge to beneficiaries and end-users. The output targets are to be defined on a project-by-project basis. According to the Fund's 2016 Annual Report, so far, 8 projects are beginning to make a total of 14 solutions available to intended end-users.

Progress Toward Outcome Targets as per PMF

There are 2 indicators for the immediate outcome. The first outcome target is for 300,000 end-users to participate in project activities supported by CIFSRF (at least 30% women). So far, 80,000 smallholder farmers have been reported to participate in project activities (49% women).

The second outcome target is for at least 100,000 smallholder farmers to be trained in CIFSRF solutions (at least 30% women). So far, almost 40,000 people have participated in training events organized by the projects, including over 34,000 farmers (47% women).

Statements in Stakeholder Interviews

- "While they are here for product development, they provide on job training for staff this is what we cannot get anywhere else." – DC Private Sector
- "Training: I received training at district level for 3 days. I learned chicken husbandry, growing fish and raising vegetables. I now follow the techniques I learned from the training. There have been two trainings so far. This provides extra knowledge and at a deeper level, on raising fish and chickens, and growing vegetables." DC Beneficiary
- "This project provides knowledge on raising chickens, fish and vegetables... We follow instructions provided by the project. It teaches us about growing vegetables the whole year round and how to support our families... This has helps us increase our productivity and take vegetables to market to increase our income." DC Beneficiary
- "One very concrete thing for this faculty member is the training he is receiving in using the Rigaku
 machine associated with the electrospinning of nano-fibres." DC Partner

- "I have been benefitted in that I know how to look after my cows and my maize well "- DC Beneficiary
- "I have benefitted from learning how to make the animal feed. I have been taught how to make the feed by myself using the leaves. In the past, I would just cut leaves and give them to the cows. But Farm shop has taught me to make silage mixing Napier grass, dry maize leaves, dry it for 21 days and then they can after that start feeding the animals. This is better quality and also increases milk production... "- DC Beneficiary
- "I see significant capacity development in our county because of the work farmshop is doing. Before, farmers were simply treated as ignorant people and were not even allowed to enter shops. This is very new and it is imparting knowledge to the farmers who after a number of trainings are able to make decisions on their own. Farmers educational capacity is really being built. The farmshop lay out is also really good. Farmers can now go into the shops and have a discussion with the shop owners about what to buy. They are given a choice in the store and they can see for themselves what options are available." DC Sub-national Authority
- "From my observation and on committee on project operation have seen lots of capacity building focused on human elements, training programs PhD and MA sandwich with Ethiopia and Canada on job training for specialists, farmers, associations, people in different institutions. Also have been capacity building like showcases encouraging practitioners to adapt and check. Facility engagement in university labs.' DC National Authority

Annex XXIII. Phase 2 Consolidation and Scaling Up

Phase 1 Projects Receiving Phase 2 Support

Exhibit XXIII.1 Phase 1 Projects Receiving Phase 2 Support (See Exhibit XIV.1)

	Number of new projects per Call for Proposals (of total)	Number of new projects that went to Phase 2	Percentage
Call 1	3	2	67%
Call 2	10 (plus 1 extension)	4	40%
Call 3	6 (plus 1 extension)	6	100%
Totals	19 (plus 2 extensions)	12	12/19 = 63%

Illustrative Quotes

The following two quotes Illustrate IDRC's perspective on the move from Phase 1 to Phase 2.

- "Phase 2 has capitalised on the lessons learned of Phase 1." IDRC Staffperson
- "Phase 1 created a proof of concept on many fronts, and Phase 2 has been about "moving beyond islands of success." The various projects are being linked up now." IDRC Staffperson

Reasons for Phase 1 Projects Not Receiving Phase 2 Funding

About 2/3 (63%) of Phase 1 projects received funding into Phase 2. While disappointing to project PIs and coordinators for projects that did not see this funding renewal, the reasons given by CIFSRF for not extending funding are multiple, touching on different aspects of projects, and overall, well-reasoned.

Of the 7 (of 19) Phase 1 projects that were not funded into Phase 2, in order of importance, the factors given in 'Project Completion Reports' are as follows:

- Unclear scale up focus (e.g. Organic farming in the Peruvian Andes);
- Evidence of significant partnership challenges (e.g. Farm to fork nutrition in the Caribbean);
- Management and leadership issues (e.g. India's agrobiodiversity hotspots); and
- Contextual political issues (e.g. Aquaculture in Sri Lanka).

These factors are compiled in the table below.

Projects not funded into Phase 2	Scale up focus	Partnership challenges	Management and leadership issues	Contextual political factors	Source	Phase 2 funding
Project C	Moderate	None of note	Minor/Some	Political conflict	PCR	No (only extension)
Project D	Unclear	Major	Major	None of note	PCR	No
Project F	Unclear	Minor/Some	Minor/Some	None of note	Final Technical Report (PCR not available)	No
Project H	Unclear	Minor/Some	None of note	None of note	PCR	No
Project I	Moderate	Minor/Some	None of note	Political conflict	PCR	No
Project L	Unclear	Major	Major	None of note	PCR	No
Project M	Unclear	Major	Major	None of note	PCR	No

Legend: Mint green indicates a favourable characteristic; Light salmon indicates a minor to intermediate characteristic concern; Dark orange indicates a problematic characteristic.

Scaling up Solutions and Models

According to Annex A CIFSRF Third Annual Narrative Report (pp.18-21), "[t]here are 37 solutions being developed and scaled up in the projects to date.

Examples of the Solutions that are being developed and scaled up include:

Call 4:

- A disease management strategy to control the spread of coconut lethal yellowing disease in Côte d'Ivoire (project 107789)
- Locally-fortified unrefined sunflower oil is a shelf stable cooking oil fortified with vitamin A to reduce micro-nutrient deficiencies in Tanzania (project 107790)
- Within the Sustainable Agriculture Kit menu there are a wide range of packages that farmers can purchase to increase their production and improve land use on terraces: these include diversity seed packages, small-scale tools such as corn shellers, post-harvest storage containers to reduce losses, and small-scale farm implements such as tillers and jab planters (project 107791)

Call 5:

- A smart packaging system that uses Hexanal applied to fibreboard cartons to slow the ripening process of fruits so that it is possible to reduce losses during transportation to high-value markets in India and internationally (project 107847)
- A five-in-one multi-component vaccine for five topical diseases affecting sheep and goats in Kenya (project 107848)
- A thermo-stable vaccine to protect cattle from Contagious Bovine Pleuropneumonia (project 107849)

- Best management practices for Homestead Food Production models combining fishponds with home gardens (project 107982)
- Micro-dosing application of fertilizer combined with water harvesting in Nigeria and Benin offer a climate resilient approach to increasing production and incomes from indigenous vegetables (project 107983)
- Best management practices for improved chickpea and haricot varieties in Ethiopia (project 108984)
- A sustainable sectoral development model for improving production and income for Bolivian fishers through aquaculture (project 107985)

Call 6:

- Double Fortified Salt, which is now able to be fortified with iron and iodine by Indian processors using a premix developed by the University of Toronto (project 108123)
- Complementary fortified foods for children, including weaning pablums, porridges, and snacks, made with ingredients locally sourced from women farmers, and produced and distributed in Northern Vietnam (project 108124)
- Three improved yellow potato varieties that have 15% higher yield and higher levels of zinc and iron compared to the most cultivated potato variety in Colombia (project 108125)
- Farm Shop social enterprise, a franchise shop in Kenya that offers a one-stop-shop for farmers to improve their production by supplying seed, veterinary medicines, fertilizers, and agricultural tools to farmers. This business model takes a 'last mile' approach to reach farmers near to where they live, and provides product demonstration, clinic days, and demonstration plots (project 108126)
- A proven legume technology package, which includes seeds, rhizobia and best practices, is approved and ready for dissemination to smallholder farmers in Tanzania (project 108127)
- Dehuller machinery that will increase the efficiency of removing the hull of several types of small millets, a task often done manually by women (project 108128)
- AgroTech ICT platform that combines radio broadcasts with interactive SMS messaging and inperson mobile extension agents to increase knowledge and adoption of productivity-enhancing technologies and inputs and their appropriate use (project 108129)

Additionally, 37 scaling up models are under development by the projects approved to date. See list of scaling up models in List of scaling up pathways under development.

Examples of scaling up pathways being used to bring solutions into wider use:

Call 4:

- A model for strengthening women's role in the coconut production chain, including the implementation of field schools, plant clinics and Women Coconut Fairs to increase awareness for coconut women and men farmers on the coconut lethal yellowing disease (project 107789)
- The eVoucher offers a promotional mobile coupon to the consumer for the purchase of fortified oil, which is a tool to generate demand (project 107790)
- Using pre-existing stall-based distribution systems and existing commercial vendors to make agricultural products available with the use of cell phone feedback surveys (project 107791)

Call 5:

- Commercialization and marketing strategies for Hexanal technologies (project 107847)
- Licencing strategies for the multi-component vaccines to ensure production by vaccine companies in Africa (project 107848)
- Commercialization strategy for scaling up adoption of CBPP vaccine by smallholder cattle producers (project 107849)
- Improving access to resources, and/or markets and income through microcredit and financing options for women with home gardens, household fishponds and/or household poultry operations (project 107982)
- Satellite Dissemination Approach for indigenous vegetable production and marketing (project 107983)
- Community-based pulses seed system model to enhance use of pulses in Southern Ethiopia (project 108984)
- Sectoral approach to fisheries and aquaculture to upgrade value chains and improve markets for fish and fish products and enhance fish quality for improved income from small-scale fisheries and aquaculture (project 107985)

Call 6:

- Community-based kitchens for small-scale yogurt production, linked to a sachet distribution network (project 108122)
- Distribution of Double Fortified Salt through India's Public Distribution System, the largest food distribution network of its kind in the world, through ration shops that offer subsidized salt to 15,000,000 people across the state of Uttar Pradesh (project 108123)
- The creation of a value chain for the local procurement, processing, and distribution of fortified complementary foods for children. The distribution of these foods through local vendor networks and nutrition counselling centres will facilitate increased nutrition knowledge along with access to fortified foods in rural northern Vietnam (project 108124)
- Multiple farmers' groups and producer networks will benefit from training in the form of farmer field schools and linkages between potato seed producers; small, medium and large sized potato growers, and marketing networks (project 108125)
- Scaling up the Farm Shop franchise network will enable the social enterprise to achieve financial break-even through increasing the number of shops to 150 over the course of the project and continuing to grow the franchise across East Africa after the project ends (project 108126)
- The use of ICTs and various media products are designed to appeal to specific family members (especially young people, household heads and women) to communicate knowledge about legume technologies (project 108127)
- Commercialization of the small millet dehuller will compare the technical supporting existing equipment manufacturers with an incubator, licensing and merchandising approach in order make the dehuller widely available (project 108128)
- A sustainable business model for the delivery of the AGROTECH extension service, which combines radio, SMS and mobile agents will be tested in order to determine how extension services can be offered in a sustainable way, independent of government funding (project 108129)"

Annex XXIV. Phase 2 Generation of Knowledge on Sustainable Food Security and Nutrition that Benefits the Poor

Progress Toward Output Targets as per PMF

There are 3 output targets for knowledge production. The *first target* is for 15-20 projects to be successfully completed by the end of Phase 2. So far, 18 projects have been approved and are being implemented. The *second target* is for 20-30 application-ready environmentally sustainable solutions for improved FS to be tested and /or fine-tuned by the end of Phase 2. So far, 37 products and models are being tested by the 18 projects that include different types of technologies and methodologies, such as: vaccines and vaccine constructs, post-harvest loss reduction technologies, best management practices, improved varieties, food products, packaged fertilizer and distribution models, training packages, product packages, ICT vouchers, disease control practices. The *third target* is 20-30 scaling-up models to be field tested by the end of Phase 2. 37 scaling-up models are being developed by the 18 projects approved to date.

Progress Toward Outcome Targets as per PMF

For Phase 2, the PMF includes 3 indicators for the immediate outcome related to knowledge generation: Increased global, national, and local knowledge of new, environmentally sustainable, gender sensitive research solutions and scaling up models that increase agricultural productivity and the nutritional value of food in developing countries.

Exhibit XXIV.1 Indicators and Targets for Intermediate Outcome 200: "Increased Knowledge of Solutions and Scaling-up Models"

INDICATOR	TARGET
200.1 Number of gender sensitive, user-ready solutions developed (Call 4) and/or fine-tuned (Call 5) and adapted to different locations and ready to be scaled up , focusing on key food security themes (ob. 1 fine-tuning) focusing on key food security themes	At least 10-15 promising solutions developed by the end of the CIFSRF Phase 2 100% of CIFSRF Phase 2 funded projects have successfully developed, fine-tuned, field tested and/or adapted effective, proven research based food security and nutrition solutions by the end of the program The majority of scaling up models (50% +1) developed and/or field tested have proven to be effective
200.2 Number and type of scaling up models ready to be deployed .	At least 10-15 promising scaling up models developed by the end of CIFSRF Phase 2 70% of CIFSRF Phase 2 programs have undertaken the design, systematic assessment and/or testing of dissemination, delivery and scaling up models.
200.3. Number of research sites (communities, regions, countries) per food security solution.	At least X sites per project has been reached.

Source: CIFSRF Annual Report 2016, Annex A.

Concerning progress toward the targets for indicators 200.1 and 2002, the report notes that 37 scaling-up models are being developed by the 18 projects approved to date. Concerning the target for indicator 200.3, it is noted that to date, the number of sites reached by each project ranges from 2 to 55, depending on the type of solution under development.

Statements in Stakeholder Interviews

- "We are less than halfway but the approach linking nutrition and agriculture and scaling technologies for both together – this is new for Ethiopia. How do you move from technology A to next district – this is a type of product that can be very easily regionalized by government and NGOs. But we don't yet have those methodologies – so the development of the scaling up methodologies for this is also new." – International Partner
- "Now that the ponds are getting older, there is starting to be some issues with the quality of the water in fish tanks. Studies are being done by the project to find an optimal way to increase to quality of the water. Now, an experiment is currently undertaken whereby a machine feeds in oxygen into the water. The quality of the water will be tested at a later stage to see whether the machine enhances the quality of the water." DC Beneficiary
- In India today, there has been a lot of research with paddy and wheat but for millets, it is negligible. These are the first projects in the public sector..." External DC Stakeholder
- "Under Phase 2, there are several specific technologies being investigated: Pre-harvest spray of EFF (the Hexanal formulation), post-harvest dip with EFF, exposure of fruit to Hexanal as vapor, Hexanal impregnated sheets/wraps for packaging, Hexanal impregnated bio-wax for coating fruit, sachets containing Hexanal for packing, monitoring socio-economic impact. Phase 2 is also expanding the use of agricultural wastes such as banana pseudostem, improving the environmental sustainability of fruit packaging, and new opportunities for farmers. Will also integrate technologies into packaging systems for temperate fruits in Canada. Phase 2 is fine-tuning the technologies and practices to new contexts, geographies and larger scales." DC Partner
- "Manufacturing process and taking the product from the lab to scale will generate new knowledge. Scientific study generally not undertaken in the areas in which the students studied. Thus often, these studies were the very first in the study areas." – DC Partner
- "The farm shop model is something that is new in the Kenyan concept and new knowledge on franchise modelling will be generated locally. The study on franchising, social entrepreneurship and socially inclusive business. This will open up research capacity and publications in the long run. Farm shop will change the way farming is done in this country." DC Partner

Annex XXV. Phase 2 Improved Awareness and Understanding

Data on Media Occurrences

Exhibit XXV.1 Number of Unique Media Occurrences

	PHASE 1 OCT. 2009 - NOV. 2014	PHASE 2 APR. 2015 – MAR. 2016	PHASE 2 IN RELATION TO PHASE 1		PHASE 1 OCT. 2009 - NOV. 2014	PHASE 2 APR. 2015 – MAR. 2016	PHASE 2 IN RELATION TO PHASE 1
CIFSRF Program				CIFSRF Projects			
News	62	9	15%	News	136	34	25%
Radio	10	2	20%	Radio	75	8	11%
TV	4	0	0%	TV	66	6	9%
Social (Youtube, Facebook, Twitter)	26	84	323%	Social (Youtube, Facebook, Twitter)	25	114	456%
TOTAL	102	95	93%	TOTAL	302	162	54%

Source: Annexes of Phase 1 Final Report and Phase 2 Third Annual Report

Measuring Awareness and Understanding

The issue of monitoring and evaluating the effectiveness and results of communication and knowledge management activities is a recurrent challenge for the development community. In the case of this evaluation, our analysis is informed by the literature on M&E pertaining to communication for development, knowledge management as well as policy influence and advocacy. A survey of the literature quickly reveals there is no singular approach to impact measurement of policy influence/knowledge/communication initiatives. The most frequently challenges raised include some being faced by CIFSRF: illustrating causality and the difficulty of attributing impact; time and resources needed to conduct M&E activities; pressure to demonstrate results versus time needed for activities to lead to qualitative changes in stakeholders' mindset.

M&E approaches generally considered effective include, but are not limited to, Critical Incident Technique, Contribution Analysis, Most Significant Change, Appreciative Inquiry, Timelines, Outcome Mapping (see references below). It is yet too early into Phase 2 to conduct an impact assessment. Instead, the evaluation team suggests using a communication-focused case study method to explore impact of project and program efforts, as well as points of tension and synergy between types of actors and dissemination levels: project/program, IDRC HQ/ Regional Offices, IDRC/GAC, GAC Ottawa/Field Offices, and Canada/DC. CIFSRF should engage Phase 2 project stakeholders in the selection of projects to identify some who self-declare as meeting successes and others as experiencing difficulties (see Hulsebosch, J. Turpin, M. and S. Wagenaar. (2009); Lennie, J. and Tacchi, J. (2013); Mansfield, W. and Grunewald, P. (2013); Tsui, J., S. Hearn and J. Young (2014)).

Relevant Survey Data

In the survey, PIs reported CIFSRF Phase 2 is most effectively contributing to improved awareness of potential solutions to FS issues among *small-scale private sector actors in DCs* (63.8% agree/ strongly agree), *policy-makers in DCs* (58% agree/strongly agree).

They report moderate effectiveness reaching the *private sector national level actors in DCs* (56.5% agree/strongly agree) the *general public in DCs* (53.6% agree/strongly agree) and *the development assistance community in Canada* (49.2% agree/strongly agree).

The least effectiveness was reported with respect to the general public in Canada and the private sector at the multinational level (respectively 31.9% and 39.1%).

From the Mid-term Evaluation Report Annex

400 – *Improved awareness and understanding*: "There was mention that at higher levels of the Canadian government the scope for raising public awareness through targeted communication activities arising from CIFSRF was being hampered by complex procedures relating to press release. Some experienced staff also expressed doubts about the extent to which policy could be influenced by communication activities. Other experienced staff felt that the public, and possibly also some policy makers, could be influenced by more use of social media to share information about CIFSRF activities.

While there were different perceptions of the extent to which CIFSRF outputs could be used to influence higher level policy making and implementation, the review team's site visits across the three continents suggested significant scope to influence local policy development and implementation." (MTE Annex p. 88)

Illustrative Quotes

- "There is a lot of information on what the projects are and what countries they are in, but there are no concrete linkages. I have never sat down with IDRC or CIFSRF to say what are the projects being worked on at a regional level in terms of addressing agricultural innovation, productivity, access to markets which are the areas we are focusing on." Canadian Embassy/High Commission Stakeholder
- "The Fund needs a more sophisticated communications strategy. Success stories are important but they are not enough. The strategy needs to define: Who to communicate with; For what purpose; At what time during the annual cycle of meetings and decisions in different organizations. You need to embed information on CIFSRF in ongoing dialogues. There needs to be continuous communication at the different levels. People need to know what's happening and what the impacts are." GAC Staffperson
- "In our community, there has been contribution to awareness and understanding. For instance, for myself, there is change because actually we were feeding let say like cows as much as we can until you see the cow cannot eat anymore. But now we have learnt a cow can feed according to the weight. So you know that is an added advantage because maybe I was using let say like the 50kg on one cow. You see when I am saving here, I use the coin on the other side." DC Beneficiary
- "Individual projects have the intention to engage small holder farmers, local governments etc. However, this is not true for all projects as this depends on the nature of the projects and whether the project is ready for that type of engagement." – IDRC Staffperson

- "Don't know about all the people, but in our locality this project is known by the people, farmers, private centers, universities very small project actually so not sure how much publicized." DC Sub-National Authority
- "Awareness has been created in the scientific community. The small scale farmers who have been involved in the socio economic research are also aware and understand the [results of the research] as a potential solution to the [problems they face] which is a true challenge for them." DC Partner
- "We asked for the CIFSRF communication priorities to combine forces. We are doing a lot of our own communication but we are supporting CIFSRF objectives and it is unfortunate that there is a huge communications gap. It is ironic in the inception workshop where CIFSRF was telling us how we should be communicating findings and I think we are a few dozen steps ahead of CIFSRF. It is good words but there is no implementation. I have signed up for the CIFSRF emails and that is the only kind of communication and this does not bode well for awareness. Even the website, there is no one home. (...) Maybe this is a capacity issue." Canadian Partner
- "(...) this program has been around for quite some time now and there's insufficient awareness of how remarkable some of the projects being supported are. (...) they're noble worthy, but they're not being talked about, so that's an area where much more strengthening needs to be done, but the governance committee has recognized that and there is a communications strategy that is currently being developed." GAC Staffperson
- "The approach is a good one. CIFSRF is being shared through University networks. The outreach is specialised, so not so much to the general public." GAC Staffperson
- "High-level Global Affairs people can help inform other key development actors about the Fund."
 GAC Staffperson
- "I am very impressed with the outreach strategy to these broader groups who could inform policy and programming, including the CME, the CCIC, different national associations and others, like membership associations like the Federation of Canadian Municipalities, the Council for Global Cooperation and others. The communications Strategy 2016-18 contains a very clear breakdown of relationships, actions and activities right through. There are many good events but what about follow up? We need to find ways to study the impact into the long term." GAC Staffperson

Annex XXVI. Phase 2 Developing Country Policies and Programs

Overview

Based on interview data, *all sampled projects* are either influencing or informing (50%), or are on the way towards influencing or informing (50%) policies and/or programs related to FS and nutrition in DCs.

<u>Influencing/informing policies and/or programs:</u> A project is understood to have influenced or informed policies and/or programs when there is evidence of a link between research activities and contribution to knowledge (informing) and/or change (influencing).

On the way towards influencing/informing policies and/or programs: A project is understood to be on the way towards influencing or informing policies and/or programs when project activities seem likely to lead to a future link between research activities and contribution to knowledge (informing) and/or change (influencing).

Exhibit XXVI.1 Influencing and/or Informing Policies and/or Programs

	INFLUENCING/INFORMING POLICIES AND/OR PROGRAMS	ON THE WAY TOWARDS INFLUENCING/INFORMING POLICIES/PROGRAMS
Ethiopia – Pulses 107984	Yes	
Bolivia – Fish 107985	Yes	
Cambodia – HFP 107982	Yes	
Kenya – CBPP 108849		Yes
India – Hexanal 107847		Yes
Kenya – Farm Shop 108126		Yes

Influencing/Informing Policies and Programs

1. Ethiopia

Based on experiences with CIFSRF, the annual agriculture and health government bureau plans in certain parts of Southern Ethiopia now include double cropping (with protein-rich and nitrogen fixing legumes as the second crop), as well as nutrition-related outreach on the value and preparation of legumes.

Quotes from Ethiopian National Authorities

"Policy makers are participating in events like field days or annual meetings – and they are verifying and gaining confidence that this intervention is making a difference. They are putting the expansion of this technology into the annual plan expansion based on the lessons driven from the project itself. Regional bureau of agriculture – for example – all the managers are working on this. All finance, administration, office – all are working together. At lower level of district – all the offices are working together on this, and at grassroots – the development offices are working

together on this as well. This can be taken as overall policy mainstreaming - this is a residue of this project."

- "The future of this work is very important. This technology very very important for the farmers they are improving their lives. Reaching two crop times in year very important for the future."
- "Where the project works, it doesn't go on its own. They work with the government agricultural system when they select farmers. The zonal or district offices, and planning at the regional level. This was a choice by the project in order to make sure it succeeds and its outcomes can be adopted by the [government] agricultural system".
- "At the end of the line –the country can take over. Starting in only 1 woreda [administrative zone] and we think that after that we will expand to all of our region then country can take it afterwards."
- "Many projects are being handled by higher level institutions or other public institutions we may hear about them from media – but this project is unique in that it makes sure it partners with relevant people and also seeks advice and comments about its activities and includes relevant stakeholders so honestly it's a model. Not only for the region but also for nationally connected projects."
- "Good understanding of priority commodities we are working on. Good level of complementarity. Project is capitalizing on something that is also a regional priority which makes it a relevant activity."

2. Bolivia

Results from the project baseline survey on health and nutrition, which illustrated low consumption rates of fish among Bolivian families in the Northern Amazon Basin, contributed to informing the five-year strategic plan (2014-2018) of the 'Ministerio de desarrollo rural y tierras' which now includes an objective aimed at increasing national fish consumption to 5.3 kg per capita.

Quotes from Bolivian National Authorities

- "Based on results from the survey, the project team conducted with the support of the Mayor's Office in Riberalta a campaign on the importance to consume more fish for the health and well-being of the population. Television and radio was used in this campaign to disseminate information to the public, especially on the nutritious benefits of eating fish. Interviewees affirmed that the population became more aware of the importance of consuming fish and that, in general, the local population has increased their fish consumption."
- "The interviewees noted that the fisheries project in Riberalta contributed to policy makers approving the 'day of the fishermen'. This is very important in Bolivia as fish consumption is very low, the fisheries sector is disorganized and fishermen have not been recognized. This official day recognizes the importance of fishermen."
- "As noted, the fisheries sector is disorganized and the legal framework surrounding it is obsolete and seldom implemented. In this regard, the project contributed to gathering and systemizing existing regulations on fisheries in the Bolivian departments of Pando and Beni (Northern Amazon Basin)."
- "The project contributed to supporting the development of a legal proposal for a national law on fisheries. The Ministry of rural development and land has a five-year sectoral plan for the agricultural sector. The latest plan was informed by information derived from studies undertaken by the project."

3. Cambodia

The project has informed the development of the National Strategy for Food Security and Nutrition (NSFSN 2014-2018) in several ways: by demonstrating the protein value of indigenous small fish which are now specifically included in several places in the strategy (including calling for indigenous small fish ponds throughout the country); by helping to illustrate the value of breastfeeding, also included in the strategy; by surfacing previously unknown data regarding high levels of anemia among women. The project team remains actively involved in the Technical Working Group for Social Protection and Food Security and Nutrition (TWG-SP&FSN) whose mandate is the NSFSN's implementation.

Quotes from Cambodian National Authorities

- "The Canadian research fund is important for Cambodia, either through HKI or the government, as long as it goes to the Cambodia people. This research and evidence is important to develop government policy and strategy that can be implemented, and then can be pursued through multi-sectoral work. CIFSRF absolutely meets the standard of reaching Cambodians. This fund is key for research. Now, more funding for implementation is required!"
- "This project contributes a lot to the Food Security strategy and nutrition in Cambodia, for example, in terms of aquaculture, home gardening, homestead food production, the forum between students and policy-makers and implementers, to introduce policy and strategy to students at the Agricultural University. This is supported by HKI in Cambodia. Research on small indigenous fish species, which are now recognized by high level government, having been overlooked before, as a source of nutritious food. Previously, large fish were favoured. As a result of this knowledge on small fish, Cambodia has banned the cultivation of snakehead fish which consumes small indigenous fish species. This has been a lesson learned from the HKI/UBC program."

On the Way Towards Informing/Influencing Policies/Programs

4. Kenya (CBPP vaccine)

According to interviewees, the CPBB vaccine is priority number two in Africa in terms of livestock diseases. Kenya's Department of Veterinary Services (Ministry of Agriculture and Fisheries), has served or is serving on both the Steering Committee and Management Committee, as a regulator and government representative. Meetings are being regularly held with policy makers at political and technical levels to prepare for when trial results and eventual vaccine are available.

Quote from Kenyan National Authorities

"Pastoralists (who often are poor) will benefit the most from the vaccine. This vaccine can turn around people's lives. CBPP is very chronic. If the vaccine reduces the death of animals, it will impact the livelihood of the poor. The workers, people who contribute milking and feeding of animals are mainly women and they will continue to enjoy the proceeds from the products in terms of more food and income for their household. The household will benefit eventually, if an owner is able to sell a bull that does not have CBPP, the money can help greatly to take care of the family. This will impact food security. "

5. India

The India-based PI is head of the country's Nanotechnology Platform, and CIFSRF research is feeding directly into national nanotechnology policy discussions. The Indian Council on Agricultural Research (ICAR) has expressed interest in promoting nano Hexanal to reduce post-harvest losses for all fruits.

Quote from Project PI about Indian National Authority Interest

"At national level, the Indian Council on Agricultural Research (ICAR) is interested in promoting Hexanal. In the last meeting I had with them, the Director General came and wants to promote it at a national level to reduce post-harvest losses for all fruits. When he picks up the technology, it will mushroom. And then there will be a policy at national level."

6. Kenya (Farmshop)

This is a private sector project with no near term policy aspirations. Despite this, according to interviews with county-level officials with the Ministry of Agriculture, policy-makers are considering using Farmshop as a mechanism to distribute county-level subsidies to poorer small-scale farmers. Farmshop was also noted as a potential vehicle for supporting small-scale farmers to distribute their output. The same official reported that the Ministry of Agriculture is exploring ways for Farmshop staff to liaise with government workers.

Quotes from Kenyan National Authorities

- "The results from the work farm shop is doing has not been used in policy yet but as a county, we are thinking about it and trying to find ways in which farm shop staff can liaise with government workers to make the work more effective. As a government, we go to many more areas than Farmshop is able to, and we think we can impact the scaling up strategy in a positive way. "
- "We as a county government provide subsidies to poorer small scale farmers. Now that we have seen that Farmshop brings in quality inputs, we are looking to see if we can give our farmers their subsidy quotas to purchase their inputs from Farmshop. "
- "We see significant improvement in the yields of farmers. We hear testimonies from many farmers about crops responding well even in harsh weather conditions and we at the county office are very happy with the results and the progress."

Relevant Survey Results

- CIFSRF has contributed to better public policies related to food security and nutrition in developing countries (Phase 1, Phase 2 combined: 66.7% agree or strongly agree, with stronger agreement from developing country respondents).
- CIFSRF has contributed to better public programming related to food security and nutrition in developing countries (Phase 1, Phase 2 combined: 65.2% agree or strongly agree, with more weighting towards agree).
- Results generated by CIFSRF-funded research have successfully responded to the needs of developing country governments (Phase 1, Phase 2 combined: 79.7% agree or strongly agree, with more developing country respondents weighted towards agree).
- In the case of their project, the results of research have been adopted by developing country governments (Phase 1, Phase 2 combined: 63.7% agree or strongly agree, with more weighting towards agree, and higher ratings from developed country respondents than developing country respondents).

Annex XXVII. Phase 2 Appropriateness and Feasibility of Ultimate Outcomes

Illustrative Quotes

Virtually all the stakeholders who were asked about the Fund's objectives felt they were appropriate. However, many wondered if it would be feasible to achieve the intermediate and ultimate outcomes within the time and resources available. Some illustrative examples are as follows:

- "Food security needs of the poor are being addressed and thus this project continues to be appropriate and ultimate outcomes appropriate as well." – DC Partner
- "Outcomes are appropriate. The projects and the program was very well designed. My sense is
 that they are relevant and they are achievable. Some of the projects are very well advanced
 towards these outcomes. I think the outcomes are still relevant and our goals are aligned." DC
 Partner
- "The goals of the Fund are definitely still relevant." GAC Staffperson
- "Program outcomes are appropriate. Definitely with women, the research shows that increasing women's access to agricultural inputs, will increase productivity. FAO has done some work on this. And CIFSRF has been very strong on the gender aspect." Canadian PI
- "Yes I think so. Biggest challenge remains that programming on five year windows by definition will never achieve ultimate outcome in five years, don't even achieve intermediate outcomes in that time." GAC Staffperson
- "Appropriate timeline may need to be more realistic about how much time will take to achieve. For example, the vaccines: need to overcome bottleneck of regulation; need to do lots to get out into marketplace; unanticipated challenges." – GAC Staffperson
- "The ultimate goals of the Fund are still appropriate, but it's difficult to see how one can actually achieve such lofty goals." SAC Member

Annex XXVIII. Phase 2 Temporal Aspects of Research Benefits

Lessons from Agricultural Research for Development

Science and technology studies stress the long-term nature of agricultural research and innovation processes. The World Bank's 2008 World Development Report, on *Agriculture for Development*, refers to plant breeding and crop improvement as "slow magic," the benefits of which emerge and diffuse over decades (World Bank, 2007: 159). In their seminal book on Crop Variety Improvement and its Effects on Productivity, Evenson & Gollin (2003: 12-13) note that, "the Green Revolution is better understood as a 40-year history of steady productivity gains than as a one-time event."

An independent meta-evaluation of the Consultative Group on International Research (GCIAR) concludes that the increasing role of restricted, project funding from individual donors is "increasing transactions costs, and reducing the efficient use of resources ... The result is not only increased time spent by Center scientists, managers, Center boards, the CGIAR chairman, and the Secretariat on fundraising and negotiating with individual donors on research programs ... The opportunity cost of increased fund-raising and negotiating is forgone upstream, long-term research" which generates the most significant impacts over time (Lele 2003: 11).

Innovation Funds, like CIFSRF, are not designed to support long-term research, but to tap into pools of creative ideas and emerging innovations (technological and organizational), to mobilize new partners, and to facilitate significant opportunities for synergies in innovation for development (Ernstberger and Rajalahti 2012: 383). But experience shows that even the projects supported by innovation funds take time to develop and pilot-test new technologies, facilitate farm- and market-level innovation processes, and scale up the results to achieve significant impacts.

A recent analysis of 14 cases of innovation for inclusive value-chain development in developing countries concluded that "time is essential for results to emerge. The most successful interventions reviewed in this book benefitted from continuous support – from donors, international organizations, and national partners – over a decade or more" (Horton, Donovan, Devaux & Torero 2016: 25).

Short-term projects often limit capacity building and jeopardize sustainability of results. As Ernstberger and Rajalahti (2012: 383) note, "the risk of 'projectivization' and the accompanying failure to build capacity are acute in grant schemes." Similarly, an independent assessment of the US Feed the Future Initiative (Elliott & Dunning 2016) notes that, "Feed the Future is under pressure to show results" (page 1) "With so much focus on reporting early and often about the progress in implementing the initiative, there is a risk that it increases the pressure to disburse quickly and in ways that may not produce sustainable results" (page 21). The authors conclude with the cautionary note that, "we are concerned that pressure to demonstrate results in the short term may undermine efforts to ensure they are sustainable."

Survey results

The PIs surveyed and the individuals interviewed who were responsible for implementing CIFSRF projects frequently noted feeling strong pressures to report on results and to complete projects on what they considered very short timelines. When we asked PIs to identify CIFSRF's three main weaknesses or areas in which it could be improved, 30% of the Canadian PIs and 36% of DC PIs identified issues related to the short duration of projects as the main weakness of the Fund.

Implications for CIFSRF

Ideally, the implementation period for CIFSRF projects would be longer, to provide time for: developing working relations within new partnerships; developing needed capacities for managing complex research programs; and conducting the sequence of activities needed to develop potential innovations, pilot-test them under diverse circumstances, and then scale them up to achieve significant impacts.

Whether or not it is possible to extend the implementation period of future CIFSRF projects, it should be kept in mind that historically, the benefits of agricultural research have emerged over long periods of time. Short timelines combined with overly ambitious goals may result in stress and frustration, misallocation of resources, and reduced efficiency.

Annex XXIX. Phase 2 Food Security Needs of the Poor

Noteworthy Gaps in Ensuring Relevance to the FS Needs of the Poor

In Phase 2, certain noteworthy gaps have appeared:

- The Call 6 'business model' project assessment grid included no mention of FS, and no section for relevance for the poor or small-scale farmers. Call 6 included more general development goals, including scored criteria for alignment with "regional, local or national development priorities and Canada's development policies". "Fit with CIFSRF goals and priorities" was in the non-scored overall comments section of the assessment grid.
- The language for Call 6 privileged projects employing private sector and/or business-oriented scaling up pathways, as made evident by this statement from the Call: "Successful applicants will need to present (...) private sector and/or business-oriented not-for-profit organizations playing a central role." There are as yet no clear advantages of any one pathway over any other. Research on scaling up pathways is expected to add insight in this area. Several key stakeholders argued the merits of undertaking political economy analyses of Phase 2 innovations as an inherent part of their scaling up.
- Some projects introduce "seed packages" into communities. There is no apparent parallel support for maintaining in situ use of farmer's varieties or for consideration of the potential increased reliance on external factors (debt, unsteady supply or pricing of inputs, fluctuating or low market prices for commodities, decreasing yields from purchased seeds, etc.) for resilience and FS.
- Several projects include the marketing of a product, or products protected under patent rights. IDRC intellectual property rights (IPR) guidelines are key to ensuring FS benefits go to intended beneficiaries. These stipulate that "...right and licenses must be made available to end users on reasonable terms and conditions which promote widespread access to the project invention and related IPR in identified developing world countries" (IDRC Intellectual Property Rights Guidelines). There is currently no CIFSRF IPR monitoring mechanism to ensure these are respected (including beyond the life of the program). This is particularly important given the extensive history of the impact of IPRs on limiting widespread access to patented technologies, for example with regards to access to HIV/AIDS medication in Africa.

Illustrative Quotes

- "This has been very positive for us, very good. We have more income. We have more vegetables to bring to market. We have more vegetables for ourselves." DC Beneficiary
- "We all none of us sitting here has other employment. We rely on those cows and poultry. And we are able to have food. We have children they are at school and we can afford to pay their school fees. So the work Farm Shop is doing with us is really helping us." DC Beneficiary
- "Women farmers, we have access to knowledge that is helping up improve our yield and that is a very good thing. My family can survive on the food we get from the farm and also the income from the rest which we sell." – DC Beneficiary

- "We are happy to see this project in our village. We understand the project to have 3 objectives:
 - 1) Reduce poverty: Family situation is better off. Our living standards have improved.
 - 2) Encouraging the eating of organic vegetables: Organic vegetables made me feel safe for my family and I. We have better health.
 - 3) Reducing daily expenses: The family is better off with fewer expenses. Healthier children also means fewer expenses." DC Beneficiary
- "Before the training, the shelf-life of the fruits was low. The farmers are aware of the benefits of Hexanal spraying for mangoes and would like to pursue it. They say we can extend fruit on the trees for one month and then we can increase our income by marketing later. They want to sell directly and bypass the middleman." – DC Beneficiary
- "Maybe you could end a month even without buying a meat and now you buy regularly because you have more money in your pocket." – DC Beneficiary
- "Pastoralists will benefit the most from the vaccine. This vaccine can turn around people's lives. CBPP is very chronic. If the vaccine reduces the death of animals, it will impact the livelihood of the poor. The workers, people who contribute milking and feeding of animals are mainly women and they will continue to enjoy the proceeds from the products in terms of more food and income for their household. The household will benefit eventually, if an owner is able to sell a bull that does not have CBPP, the money can help greatly to take care of the family. This will impact food security." DC National Authority
- "The poor are eating it because it's rich in nutrients and minerals. So that habit will spread to the common man and then the availability will grow and processing becomes easier. In fact, the dehuller is one of the right interventions to simplify the process because one of the obstacles for use of millet is this processing. [...] So the project addresses a key bottleneck." DC Sub-National Authority
- "Yes, yes [the project is relevant for food security needs of the poor]. Malnutrition is not only lack of food but also lack of awareness and food diversity. If the community can use pulses instead of animal protein it will be better as project can help improve production areas and what they are already growing in their house, they can eat, it is easily transforming our nutritional problem." DC Sub-National Authority
- "We see significant improvement in the yields of farmers. We hear testimonies from many farmers about crops responding well even in harsh weather conditions and we at the county office are very happy with the results and the progress." – DC Sub-National Authority
- "When there are very few crops in the system, farmers are very much prone to shocks such as market/climate changes so diversification is very important. Legumes are cash crops and farmers can get money out of it and buy required household inputs. Farmers can send children to school and improve household nutrition because legumes are a major source of protein. Infants and mothers can really benefit. The benefits are really huge." Key External Stakeholder
- "It is not at all clear that the vaccines being developed could be successfully marketed to poor farmers, much less benefit them." – GAC Staff person

Annex XXX. Phase 2 Private Sector Priorities

Partnerships

- Call 6 required at least "one business-oriented organization (either Canadian or eligible country organization) in the partnership playing a key role with meaningful participation in activities and budget. Applicants had to use a business-case approach in describing the innovation and its scale-up. The Call was distributed this time through private sector networks despite which not many submissions from the private sector were received overall (see 3rd annual report, p. 19).
- CIFSRF attracted more private sector actors from Phase 1 to Phase 2 and from Call 4 to Call 6 in Phase 2:
 - Calls 4 and 5 approved 10 projects and of the 26 grantee organizations in project partnerships, half are universities (50%), followed by Non-Governmental Organizations (27%), government (15%) and private sector (8%). Only two of the partnerships include private sector organizations.
 - Call 6 in 2015 had 8 projects funded and among them, 3 private sector organizations as partners.
 - In terms of third party organizations associated with projects, 27% (16) are private sector in Calls 4 and 5. Call 5 documents and announcements stated that "priority would be given" to projects that include new partners from the public sector and civil society or multi-sector partnerships when appropriate.
 - The private sector represents the largest type of third party organization in Calls 4 and 5 and for all Calls combined (count = 23).
 - Private sector percentage in total applications received in Call 4 and Call 6 is broken down as follows (Call 5 was a closed Call):
 - Canadian applicants: 13% to 18%, respectively
 - Eligible country applicants: 4% to 24%, respectively
 - Third parties: 14% to 24%, respectively

Outreach Efforts

Output 411 – research results widely disseminated to the research, development assistance, community and private sector (Annex A of 3rd annual progress report):

13 to the private sector in DCs and 25 to private sector internationally.

Annex XXXI. Phase 2 Program Level Support for Scaling Up

Portfolio Approach Aspirational Distribution of Success

According to key CIFSRF staffpersons, the following aspirational distribution for the successful scale-up of innovations is built into the portfolio approach:

- 5-10%: The effective scale-up of a small percentage of environmentally sustainable innovations to international levels and/or impacting millions of people, particularly small-scale farmers and women.
- 20-30%: The effective scale-up of a moderate percentage of environmentally sustainable innovations to national and/or sub-national levels, impacting thousands, even tens of thousands of people, particularly small-scale farmers and women.
- 60-75%: The majority of innovations being pursued will either have very low-level effects or be abandoned altogether.

Illustrative Quotes

A series of scaling up workshops have been hosted or are being planned by CIFSRF (see Exhibit XXXI.1).

Exhibit XXXI.1	CIFSRF Scaling-Up	Workshops 2015-2016
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Location	Date	Participating projects
Benin	October 2015	Call 4 and Call 5 projects in Africa
Cambodia	March 2016	Call 4, Call 5, and Call 6 projects in Asia
Kenya	August 2016	Call 6 projects in Africa
Colombia	September 2016	Call 5 and Call 6 projects in Latin America

Source: Draft CIFSRF Third Annual Narrative Report (p.34)

Project PIs have expressed appreciation for these workshops, as indicated by the following illustrative quotes:

- "The thematic and regional workshop events that were supported by the program were very useful in bringing together researchers with diverse perspectives and experiences..."
- "Organizing workshop is an excellent initiative like scale up and gender workshop. If possible, suggest to organize more workshop on other important areas like sustainability, documentation, developing policy brief, etc."

The strongest critique for CIFSRF's approach to scaling-up is found in the following passage, articulated by a GAC Staffperson:

"Sometimes we seem to be trying to force square pegs into a round hole. It is not clear to me that from the outset, IDRC, GAC, and the grantees realized that scaling up was crucial and went about it systematically. Scaling up needs to be part of the formula from Day 1. And if it was clear to IDRC and GAC that scaling up was important, it definitely wasn't clear to grantees what scaling up is or how it could be measured or managed. Scaling up requires facilitation, and it is not sure who on a scientific team, in IDRC or in the government would provide the facilitation.

- My impression is that whoever designed the Fund put out Calls for new ideas. The people at the Fund's office and those responsible for it were agriculturalists and food security specialists. That is fine. But what do they know about scaling up? Scaling up is now the Holy Grail to reach millions upon millions of households. But this doesn't seem to have been the logic of the fund. Instead, they were looking for solutions to problems. And now they want to scale up the results, but don't know how.
- As you can see in the IDRC Strategy, their goals include scaling up. But that goal is unrealistic. They went too far in promising to scale up innovations... You can't ask a vet to create a business plan. The vaccine team leader saw this as a scientific problem. The science appears to be good. But in addition to doing good science, other problems are equally important and require other types of solutions...
- In fact, no one knows how to scale up research results. There is no single recipe or formula. You need a multi-multidisciplinary team that can look at all the important issues, beyond science, that determine whether a bright idea ever becomes used in a practical way.
- CIFSRF needs different staffing. The people responsible for the innovations seem to be trying to scale up their results. But the fund was not able to provide the support they needed."

This sentiment is echoed by one Project PI, in a survey comment, suggesting that researchers are not the best people to scale-up innovations:

"Les chercheurs ne sont pas les meilleures personnes pour faire du développement. Une meilleure intégration de la recherche au développement est certainement nécessaire. Mais les chercheurs devraient surtout être encouragés à faire de la recherche, en lien bien sûr avec les organisations de développement, mais en laissant à celles-ci la responsabilité d'œuvrer pour le développement."

The over-reliance on research teams for designing and implementing scaling-up strategies is a common theme raised repeatedly during interviews. A passage from one SAC member provides valuable insight and guidance on this matter.

"SAC looks for scaling-up strategies, particularly in more recent Calls. But this aspect has generally been weaker than the research aspect of the proposals. It is not a researchers' strong point to link up with, for example, agri-business. So the scaling-up proposals tended to be weaker and more vague. A key to scaling up is relationships, and a few proposals outline concrete working relations. This is moving research institutions into an area where they know less."

Another SAC member brought these points clearly into focus, pointing out also how the teams have handled this in many respects, by bringing in new partners:

"For example, in Call 6, there was some very good work on new varieties of beans and Nitrogen fixing. The people involved had no idea how to scale up. So they brought in a new partner. This was Farm Radio International, a Canadian with experience in East Africa. They all gelled naturally and this is going quite well."

Annex XXXII. Phase 2 Promising Scale Up Strategies

Progress on Scaling-Up Requirements and Challenges

The evaluation team sampled 6 from a total of 18 Phase 2 projects, as listed in the left-hand column of Exhibit XXXII.1 below. An examination of each project (through document review, interviewing, focus group discussion) was undertaken to assess the extent to which progress has been made in fulfilling scaling-up requirements and meeting scaling up challenges.

Exhibit XXXII.1 Progress on Scaling up Requirements / Challenges

PROGRESS ON SCALING UP REQUIREMENTS / CHALLENGES	A GOOD SOLUTION	THE BUSINESS MODEL	THE PARTNERS	CONTEXTS AND OPPORTUNITIES	LEADERSHIP IN THE LONG RUN
Project GG	Clearly articulated	Early development	Strong partnerships, with little evidence of appropriate third parties	Highly receptive context; Ample opportunity	Moderate; Strongly suggested
Project HH	Clearly articulated	Implementation underway	Strong partnerships, also having appropriate third parties (actual and potential)	Highly receptive context; Ample opportunity	Evident; Early
Project II	Clearly articulated; considerations of environmental sustainability and livelihood benefits	Advanced development	Strong partnerships, also having appropriate third parties (actual and potential)	Moderately receptive context; Ample opportunity	Evident; Proven
Project MM	Clearly articulated	Implementation underway	Strong partnerships, also having appropriate third parties	Highly receptive context; Ample opportunity	Evident; Proven
Project PP	Clearly articulated	Implementation underway	Strong partnerships, also having appropriate third parties	Highly receptive context; Ample opportunity	Evident; Proven
Project QQ	Clearly articulated	Implementation underway	Strong partnerships, also having appropriate third parties	Moderately receptive context; Ample opportunity	Evident; Proven

The evaluation team has found that these CIFSRF projects possess the many characteristics required for effective scaling up, as follows:

- 4) A good solution: All 6 sampled projects appear to have strong, contextually appropriate solutions. A question remains about whether, and the extent to which project II may have environmental sustainability and livelihood considerations that need to be addressed.
- 5) The business model: Of the 6 projects, 4 have clear business models, with implementation underway; 1 is in the advanced stages of developing a business model; 1 has a business model in the early stages of development.
- 6) The partners: All 6 projects have strong Canadian-DC core partnerships; 3 have actual and 2 have potential third party partnerships; 1 project has little evidence of appropriate third party partnership.
- 7) <u>Context and opportunities:</u> 4 projects find both highly receptive contexts with ample opportunities; 2 projects find moderately receptive contexts with ample opportunities.
- 8) <u>Leadership in the long run:</u> 4 projects have evident and proven leadership that is likely to persist in the long run; 1 project has moderate leadership whose stamina for the long run is strongly suggested; 1 project has evident leadership, though it remains too early to ascertain its staying power in the long run.
- 9) Thus, based on a solid sample of 6/18 projects, it is strongly suggested that CIFSRF funded projects are characterised as having most or all scaling up requirements, as defined by the program.

Illustrative Quotes on Time as a Constraint

CIFSRF's overall portfolio approach is largely endorsed by a wide variety of actors that were consulted for the evaluation, with a few caveats, as per the following passages, on the matter of time (see also Annex XXVIII for a detailed analysis on the temporal aspects of research benefits).

- "It is a good strategy to pick winners and then support them. But it is important to stick with them over a period of time to build capacity to generate results over time.... It is important to pick a problem, a region, or a country and stick with it. One weakness of the fund was its ad hoc and short-term approach to research projects... Researchers are not business people, nor are they development professionals. For research to go the next step, and produce practical benefits, researchers need to work with the private sector, development organizations, or both." IDRC Staffperson
- "A major design weakness of the Fund is that it does not provide the continuity required for successful innovation and scaling of research results. Lots of resources are provided for a short time, and then funding ceases abruptly. This approach can't be expected to producing lasting results in the field. CIFSRF projects are too short." – Key External Stakeholder

Annex XXXIII. Phase 2 Integration into Global Affairs Canada Policies and Programs

Factors impeding Integration of Results

- Lack of a comprehensive strategy and accompanying resources to engage in an on-going dialogue about CIFSRF results with GAC staff at different levels and in different countries. The importance of developing a mechanism for the use of emerging results to inform programming was also noted during the mid-term evaluation of Phase 1: "The future Governance Committee meetings should increase its focus on aspects of program strategy that will enable the best possible returns from this investment, including: (...) Potential mechanisms for using emerging research results to inform CIDA programming." (P.23, Report for the Mid-term evaluation of the Canadian International Food Security Research Fund, Natural Resources Institute, 26th October 2012).
- Few dedicated CIFSRF human resources at GAC HQ (between .15 and 1.5 persons per year, based on interviews and data analysis). This constrained the ability of GAC to analyze results for GAC relevance, share results internally, develop communications strategies, build relationships between CIFSRF projects and appropriate field staff, other GAC partners, relevant donors, etc.
- Lack of synergy between CIFSRF and GAC country strategies, priorities and timelines. CIFSRF employed a thematically open Call process that was assessed as leading to more innovative proposals than directed Calls. It was also used as a risk mitigation strategy due to changing priorities within GAC. Therefore, by design, proposals were not linked to GAC country priorities, which may have limited opportunities for complementarity and collaboration. Timelines were also a challenge as country strategies run for five years and it is difficult to integrate new programming in the middle of a five-year strategy (even in the case of potentially positive research results). Additionally, few country strategies within GAC are focused on food security.
- Limited human resources, high staff turnover, and lack of incentive to work on CIFSRF within country missions. Though mission staff are technically responsible for being the "eyes and ears" of all development-related programming in their country of responsibility, there is a variety of awareness of CIFSRF within sampled missions, with some key staff having little to no awareness of funded projects. Due to workload and incentive structure, the emphasis within missions is largely on projects that fall within their own budgetary envelopes (i.e. bilaterals).
- Little opportunity for monitoring of projects by GAC CIFSRF staff (funding for only one CIFSRF monitoring trip per year). Officers traveling to countries with CIFSRF projects are asked to visit project sites however this is "not the same as traveling oneself".
- Potential lack of coherence between aid, trade and development agendas: Some GAC trade staff expressed interest in promoting CIFSRF results however they are mandated to advancing initiatives with clear Canadian benefits only, and not the results of Canadian supported research with benefits for international private sector actors. There is also the question of policy coherence on questions relevant for food security (the example provided was promoting local fisheries through CIFSRF while dumping Canadian fish via international trade).
- An 'overly optimistic' premise of evidence-based programming (as outlined in Endnote 19).

Of interest, 29% of survey respondents reported that in the case of their projects, research results had been adopted by the Government of Canada – denoting a gap between perception of results adoption and actual adoption of results.

Illustrative Quotes

- "We never considered it appropriate to limit our projects to Global Affairs' focus countries and priorities, for 3 reasons: (a) from the beginning, the fund was intended to have a 'global' mandate; (b) our Calls for Proposals are competitive and aim to attract the best possible proposals; (c) IDRC has a global mandate. Nevertheless, we do try to include Global Affairs' priorities in projects and to get Calls for Proposals to Global Affairs' focus countries." IDRC Staffperson
- "It goes back to resources and how we program if we have something fabulous happening in a country where agriculture or food security are not part of the priorities – [GAC staff] don't have time to listen." – GAC Staffperson
- "So what happens is that the overlap between what GAC is doing and CIFSRF is doing is so minimal that we have to force fit, or else market the results of the projects very well." GAC Staffperson
- "All are interested in moving forward on this but there are too few resources at GAC to make this happen." – GAC Staffperson
- "It is also possible that there may be a false premise at work. GAC programming may not be significant potential impact pathway for research results to come into use." IDRC Staffperson

Annex XXXIV. Phase 2 Gender Equality

Strengths and Weaknesses of the Design and Implementation of the Fund's Gender Equality Strategy

In Phase 2, IDRC and GAC are building on lessons learned from Phase 1 to further strengthen the Fund's practices and systems for integrating gender equality. At proposal stage, grantees were given clearer

instructions than in Phase 1 regarding how they are expected to demonstrate that their project will benefit women and were required to develop a strategy for integrating gender equality in their research. All grantees were also required to include in their proposal an indicative budget for implementing their gender strategy including for costs related to gender experts and training. All projects are also required to have a gender expert to support the implementation of the strategy. Lessons learned from Phase 1 showed that lack of funding dedicated to gender equality and inadequate gender expertise contributed to limited integrate of gender equality in CIFSRF projects.

IDRC has been providing more support for integrating gender equality in Phase 2 than in Phase 1, from project

practices for gender equality

Institutionalization of good

Based on lessons learned from Phase 1, IDRC updated its gender strategy which is now not only applicable to CIFSRF but to IDRC's AFS program as a whole.

Support provided by Firetail for gender equality is not only provided to CIFSRF projects but also to projects financed by CultiAF, another research fund under the umbrella of IDRC's AFS program.

inception to implementation. Project inception workshops included a module on gender equality during which grantees revised and finalized their respective gender strategy with the support of IDRC program officers. Firetail, a UK-based consulting firm, was commissioned by IDRC to provide support to CIFSRF projects for integrating gender equality during implementation. In 2016, Firetail developed a scorecard with which it conducted a baseline gender audit of CIFSRF projects by measuring the extent to which these address gender equality issues and align with IDRC's 2015 AFS gender strategy. Based on results from the gender audit, which found mixed capacities for gender among project teams (see sidebar), Firetail is developing capacity building tools tailored to projects' needs and is conducting a series of gender workshops in mid-2016. Follow-up support is being provided to project teams through periodic

Results of CIFSRF project gender audits

6 projects: Strong attention to gender

5 projects: Weak or moderate attention to

gender

4 projects: No or cursory attention to gender

online webinars. The same scorecard used to conduct gender audits in 2016 will be used to reassess project capacities at a later date and measure the extent to which projects have made progress in integrating gender equality. By way of comparison with support provided during Phase 1 (mostly through standalone workshops), the evaluation team believes that sustained technical support to be provided to project teams in Phase 2 will likely be effective in strengthening project capacities for gender equality.

IDRC and GAC worked jointly to further integrate gender equality in CIFSRF's Performance Management Framework for Phase 2. Many interviewees from both organizations noted good progress made in this area. The evaluation team noted that, by way of comparison with the PMF in Phase 1, the current PMF include more results statements and indicators that are gender-sensitive. However, there is still room

for improving the way CIFSRF tracks progress made in improving women's participation in decision-making processes (see sub-section below on women's increased participation and decision-making).

In the survey, 88% of PIs either agreed or strongly agreed that CIFSRF has an appropriate gender strategy. Seven percent was unable to judge. This represents an improvement of 8% when compared to survey results for Phase 1.

From the documents reviewed, it is not clear whether CIFSRF project teams have reached a more gender-balanced composition in Phase 2 that Phase 1. Data from the 2016 CIRSRF report indicates, however, that there is a good gender balance among graduate students participating in the projects (53% women/47% men).

Contribution to Improving Women's Decision-Making, Access to and Control of Resources

Increasing Access to Income and Resources

According to information provided in the CIFSRF 2016 report, eight solutions are improving women's access to income and 11 are improving access to resources. Through the field visits, the evaluation team noted that at least 4 of 6 projects are demonstrating increased economic opportunities and/or access to resources for women. In projects that are continuing from Phase 1 into Phase 2 (i.e. Cambodia, Bolivia), women beneficiaries noted continued access to income from CIFSRF project activities. In **Bolivia**, a

family-centered fish farming production model with a strong emphasis on gender equality is being up-scaled with the use extension officers. In **India**, the Fruit Preservation Using Nanotechnology project is contributing to increasing women's access to and control over income (see quote). In the Kenya farm shop project, women beneficiaries noted that they now have more access to income. A farm shop PI also noted that women *saccos* (credit unions) have been formed. While the **Kenya** vaccine project has not had any positive benefits for women so far as the vaccine is not yet marketed and used, it is expected to have significant positive benefits on women's income in Kenya and other African countries as a result of healthier cows and increased milk production.

In the survey, 86% of PIs either agreed or strongly agreed that CIFSRF-supported research for development contributed to improving women's access to resources. Twelve percent was unable to judge. This represents a 6% improvement when compared to survey results for Phase 1.

Evidence from field visits of increased access to income

Based on data from a focus group discussion (FGD) in India, women are fully involved in harvesting, collecting and storing – but not marketing – mangos. When the fruit is sold, they obtain the money and manage it for family purposes.

In Kenya, women beneficiaries consulted highlighted that with the farm shop project they have increased their yields, resulting in more income for the family. They noted that they can better feed their children and some even highlighted being able to send their children to school.

Improving Women and Children's Diets

According to information provided in the CIFSRF 2016 report, fourteen solutions are aimed at improve women and children's diets. Based on data collected during field missions, increased nutritional benefits mentioned in Phase 1 are being sustained in Phase 2.

In Ethiopia, interviews with country level stakeholders suggest that the project is leading to increased nutritional benefits for women and their children. For instance, one sub-national authority stakeholder noted that the Regional Health Bureau trains health extension workers on the nutritional benefits of pulse who have imparted their knowledge to Ethiopian women in 15 woredas. Based on information

provided by an international organization member in Ethiopia, as a result of the project women farmers are now keener to use legumes to feed their children.

Increasing Women's Participation and Decision-making

There is compelling evidence that women are participating in CIFSRF projects: according to data from the 2016 CIFSRF report, approximately half of all farmers testing and using CIFSRF innovations are women.

Evidence is less conclusive when it comes to women's participation in decision-making processes. In 2 of the 6 projects sampled in Phase 2, women beneficiaries consulted through FDGs noted that the CIFSRF project has been contributing to increasing their participation in decision-making processes beyond the household level (i.e. at community level, in associations). Interviews with a few country-level stakeholders suggest that two other projects are contributing, at least to a certain extent, to women's participation in decision-making processes (see sidebar).

Evidence from field visits of increased decision-making

According to one private sector stakeholder consulted, women benefitting from the farm shop project in Kenya "are beginning to make key financial decisions in the care of the animal. For example, the woman is who is [the one] taking care of the birds [and] she makes the decision because she has the money.

Based on an interview with a sub-national stakeholder authority in Kenya, "the CBPP project has involved a number of women who are at top management levels. This is quite different than other projects that I have worked on (...) This one is teaching us something quite different and is not discriminating against women."

The evaluation team noted that, in the PMF Phase 2, improvement was made in better capturing women's participation in decision-making in results statements but targets and indicators still do not sufficiently capture this. An indicator was added to the online questionnaire on the number of solutions that improve women's access to and **control** over productive resources. However, in the 2016 CIFSRF report, information is provided on solutions that are increasing women's access to resources but not on women's **control** over resources and participation in decision-making processes.

In the survey, 74% of PIs either agreed or strongly agreed that CIFSRF-supported research for development contributed to improving women's relative power in their communities. Nineteen percent was unable to judge. This higher 'unable to judge' response rate may indicate that CIFSRF is not, as noted above, adequately monitoring and reporting its contribution to increasing decision-making among women farmers.

Reducing Women's Drudgery

As noted in Phase 1, although reducing women's drudgery is not an objective of CIFSRF, IDRC tracks and reports on CIFSRF contribution to reducing women's drudgery. This may be because, while not planned for from the outset, CIFSRF decided to fund innovative proposals that address this issue. According to the 2016 CIFSRF Report, "the program is testing five solutions aimed at reducing women's drudgery in production and post-harvest management activities." While women's drudgery is undoubtedly an important aspect of women's empowerment in agriculture and food security, literature points to a need to carefully analyse the potential impacts on women and gendered access to new technologies. According to Eva M. Rathgeber from the Institute of Women's Studies at the University of Ottawa:

Mechanization of agriculture is becoming increasingly common, especially in Asia, however women are often prohibited from using such machinery because of prevailing cultural practices. Mechanization can also have an adverse impact on female employment opportunities. In Bangladesh in the 1980s, about 100,000 women per year were displaced after the introduction of rural rice mills

[...] In India, when a mussel farming project wanted to introduce semi-automated seeding machinery, poor women who worked as occasional labourers in manual seeding, were apprehensive that they would lose their jobs. (Rathgeber, 2011)

Thus, in assessing the potential for a project and the wider program to contribute to reducing women's drudgery in agriculture, it is important to draw on this wider body of experience and literature. As the PI from project KK noted, "[w]hen we brought in equipment in a previous project, men stepped in and women stepped away from power-operated machines. Before with stone milling, only women were doing it. The minute you bring a power-operated tool, the men take it. For me it is heartbreaking." In other words, machinery can have adverse impacts on women's livelihood and there is a need carefully analyse what potential negative impacts may be.

Annex XXXV. Phase 2 Environmental Sustainability

Weighting of Environmental Sustainability by Call for Proposals

The following Exhibit XXXV.1 demonstrates the steady formal deprioritization of environmental sustainability considerations over the course of CIFSRF and in particular through Phase 2, as discussed in the main body of the report.

Exhibit XXXV.1 Weighting of Environmental Sustainability

Call for Proposals	Weighting of environmental sustainability by Call for Proposals
Call 1	10/60 (16.6%) – Environmental sustainability weighted equally to other factors: Relevance of the Proposal / scientific idea; Scientific / research merit / Research effectiveness / Collaboration / Special attention to marginalized women in developing countries
Call 2	10/60 (16.6%) – Environmental sustainability weighted equally to other factors: Relevance of the Concept Note / scientific idea; Scientific / research merit / Research effectiveness / Collaboration / Special attention to marginalized women in developing countries. In addition, a \$20,000 budget line item requirement was added in case an environmental impact assessment is required.
Call 3	12.5% weighting for environmental sustainability in the Concept Note.
Call 4	12.5% weighting for environmental sustainability in the Concept Note.
Call 5	5% weighting for environmental sustainability in the Concept Note.
Call 6	15% weighting for an aggregate of all cross-cutting. In this system, it is possible to score the maximum for this category without addressing issues of environmental sustainability at all.

Distribution and Analysis of Projects Advancing CIFSRF Environmental Sustainability Priorities

The following Exhibit XXXV.2 provides an at-a-glance perspective on the entire Phase 2 portfolio's environmental sustainability priorities and the extent to which these were assessed by CIFSRF during project selection, drawing on 'Project Approval Documents' (that include Project Proposals as appendices). Where CIFSRF required an environmental review of projects to be undertaken, a related document was also reviewed. Doing so, the evaluation team has been able to assess the extent to which CIFSRF has prioritised environmental sustainability considerations in its approval of projects and in the overall portfolio of projects selected. All documents reviewed for this assessment have been listed in the 'Source' column.

Exhibit XXXV.2 Advancing Environmental Sustainability Priorities

Projects	Sustainable land management	Integrated water resources management (IWRM)	Protection and enhancement of biodiversity	Adaptation to and mitigation of climate change	Sustainable livelihoods	Source
Project AA	1	0	1	0	2	PAD
Project BB	0	0	0	1	2	PAD
Project CC	1	0	0	1	2	PAD
Project DD	2	1	1	1	2	PAD
Project EE	0	0	1	0	2	PAD
Project FF	0	0	2	0	2	PAD
Project GG	0	0	2	0	2	PAD
Project HH	1	0	1	0	2	PAD
Project II	0	0	1	0	2	PAD
Project JJ	0	0	0	0	1	PAD
Project KK	0	0	2	1	2	PAD
Project LL	1	1	0	1	2	PAD
Project MM	2	0	2	1	2	PAD
Project NN	2	0	2	0	2	PAD
Project OO	1	0	2	0	2	PAD
Project PP	2	2	2	1	2	PAD, EIA
Project QQ	1	2	1	0	2	PAD
Project RR	2	2	2	1	2	PAD

Legend: Degree to which projects are located within, and/or advance the Fund's priorities on the four environmental sustainability considerations and principles articulated within the SEA: 2 = strong; 1 = moderate; 0 = low to non-existent.

As captured concisely in exhibit XXXV.3 below, CIFSRF Phase 2 projects are most strongly situated to advance considerations and principles of biodiversity protection and enhancement, as well as of sustainable land management. By contrast, Integrated Water Resources Management (IWRM) was actively addressed by a minority of projects, and no project in Phase 2 had a 'strong' focus on adaptation to and mitigation of climate change.

Exhibit XXXV.3 Considerations and Principles of Sustainability

	Strong	Moderate	Low to Non-Existent
Sustainable land management	5 projects	6 projects	7 projects
Integrated water resources management (IWRM)	3 projects	2 projects	13 projects
Protection and enhancement of biodiversity	8 projects	6 projects	4 projects
Adaptation to and mitigation of climate change	0 projects	8 projects	10 projects

Legend: Number of Phase 1 projects located within, and/or advancing the Fund's priorities on the four environmental sustainability considerations and principles articulated within the SEA, and the degree to which this is the case.

Overall, no major environmental concerns were raised across projects during project selection and approval, although in some cases risks to biodiversity due to monocropping (e.g. Project RR), or risks to waterways from fish offal (e.g. Project QQ) were noted. In these and other cases, however, appropriate mitigation measures were outlined in Project Approval Documents and, where needed, relevant correspondence.

On the matter of sustainable livelihoods, the data reveals that the vast majority of CIFSRF Phase 2 projects are well situated to advance this priority. Only project rated less than 'strong' in terms of advancing sustainable livelihoods is Project JJ; at a population level, however, substantial health benefits may be expected. Finally, one project (Project II) has raised biosafety, socio-economic, and health and safety questions for the evaluation team, with program-level implications for CIFSRF project selection processes should the program continue beyond Phase 2.

Annex XXXVI. Phase 2 Governance

Weaknesses of the Governance Principles

With respect to the finding that "governance" as a cross-cutting principle has not been well understood:

- A couple respondents felt that the requirement is met at the proposal approval stage or by virtue
 of submission approval, in part because partner organizations are trusted with the capacity to be
 inclusive at the grassroots level.
- From 44 interviews including focus groups, three (3) mentions were made from developing country respondents and seven (7) mentions made by developed country respondents to the effect that governance was not being advanced, understood or addressed sufficiently. And two (2) mentions from developing country and one (1) mention from developed country respondents did not agree with progress on bottom-up approaches. However, see strengths that are overwhelming in favour of progress.
- Whereas project teams have received training in gender equality, no training in governance has taken place to date. IDRC has asked GAC for information that will enable them to train new grantees in this theme. GAC does clearly identify governance as a cross-cutting strategy and articulates on its webpage how to conduct a governance analysis but it is not clear whether research teams, upon submitting an application, refer to the site for further explanation.

Strengths of the Governance Principles

- Comments that emerged from the 44 interviews, including FGDs, are mostly favourable mentions with regard to governance, with 23 from DCs and 8 from developed countries. Fewer comments were made about bottom-up approaches, 3 from DC that are favourable and 4 from developed countries. These positives are supported by survey data that show agreement of on average 80% for transparency, accountability, inclusion, participation, equity but less for decreasing discrimination (79.7%).
- All projects apply some level of a participatory approach during implementation, in the testing of innovations, capacity building activities and events to establish a dialogue with others.

Strengths and Weaknesses of the Bottom-Up Approach

The evaluation also assessed the adoption of bottom-up approaches to R&D that "build and strengthen core capabilities of poor and marginalized groups to participate in decision making processes and develop local solutions."

What is meant by "bottom-up approaches" is also not clearly articulated by CIFSRF. Thus, the evaluation has adapted the public participation spectrum from the International Association for Public Participation (IAP2), which uses a scale of "inform – consult – involve – collaborate – empower." In this way, we can distinguish levels of involvement. Projects show a pattern of consulting farmers during the testing phase and progressively engaging more stakeholders at sub-national and national levels, as results become available. However, specific projects, such as the Bolivia Amazon Fish for Food, have made significant strides in collaborating and also empowering communities (see Exhibit XXXVI.1). The following results are identified for the relevant sampled projects in terms of the involvement of beneficiairy groups, communities, sub-national authorities, national and both formal and traditional systems.

On the whole, all projects show that they *collaborate* with partners in the development of alternatives and solutions. All projects also *involve* others, including end users, to ensure their concerns and

aspirations are consistently understood and considered, with the exception of Kenya vaccine project that is working with scientists in the lab. However, livestock farmers are brought in when scientists need to solicit their thoughts. More intense engagement indicated by *empower* is true for Bolivia that is the best example of a bottom-up approach and to a lesser extent for the Cambodia project in empowering the partner organization to assume leadership.

In two instances, improvement is needed in keeping farmers better informed of plans for Phase 2.

Beyond this particular analysis, the literature on technological innovations raises a critical tension in accountability – as driven by the needs of farmers or by the funding windows that are defined by donors (Whitty, 2010). In the example from the International Rice Research Institute, this is addressed by canvassing the views of beneficiaries when designing its priorities and projects, as well as in subsequent phases. Proposals need to show evidence that the team has undertaken documented participatory assessments of priority needs and associated identification of relevant research with communities.

Further, in this review of CIFSRF projects, drawing from interviews and the stories of change, the genesis of projects is with professionals and beneficiaries are not involved in project selection. Who benefits from agricultural technologies depends on how well understood are the priorities and factors affecting the decision making of the groups targeted, as the impact literature on agricultural research has shown (Meinzen-Dick et al. 2004). This further highlights the importance of involving women and poor farmers as intended beneficiaries early on.

The survey data that asks whether Phase 2 is promoting a bottom-up approach is far more sanguine, with 79.1% in agreement.

Exhibit XXXVI.1 Assessment Of Bottom-Up Approaches Using A Public Participation Spectrum

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER*
Keep them informed of plans and decisions	Obtain their feedback on analysis, alternatives and/or decisions	Work with them directly to ensure their concerns and aspirations are consistently understood and considered	Partner with them throughout and in each aspect of decisions, inc. development of alternatives and solutions	Increase the voice of end users to make their broader set of demands known
Project QQ – Call 4				
(-) negative Ph 1 farmers not aware they would be receiving support in Ph 2		Capacity building (e.g., sampling techniques on amount of fish in the river); Strengthening fish farmer associations and extension officers	4 platforms created with local authorities, private sector, fish farmer associations, extension officers and others to enhance dialogue and encourage financial coownership; 5 municipalities contributed 20% of training costs for extension officers	The Fishermen's Association of Trinidacito obtained legal personality. Project communities have a change in their legal status and are able to fish for commercial purposes. MOU was signed with the indigenous local authority to conduct the project

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER*
Project PP – Call 5-2				
Lack of clarity on the part of beneficiaries on the project trajectory More of a top-down implementation plan	Traditional village chiefs consulted on selection of Village Model Farmers	Govt actors involved in early stage of project Capacity building of farmers and network building Local NGOs are being strengthened to play active role at community level	National Project Steering Committee involves several ministries; Project partner is member of two national networks	Developing country Project Partner, as a member of a national Technical Working Group on food security issues, empowered to contribute and assume leadership
Project MM – Call 5-2				
	Project formulation stage – ideas not identified by farmers but they are consulted	Testing undertaken with farmers and a lot of meetings to hear the voices of different stakeholders	Consistent involvement of government agencies who are also prioritizing relevant crop varieties	
Project II – Call 5				
	To date, small scale farmers have formed producer groups and are being kept informed of results Consult village leaders	Capacity building in value added innovation for women's producer group	Industry associations and DC small-scale private sector actors all involved in testing and in suggesting alternatives (some are	
	in selection of model farmers		on the Project Advisory Committee)	
	Engage large farmers / private sector in testing		Leadership of DC partner organisation at national level network	
Project GG – Call 5-1				
	Farmers are brought in when researchers need to get their thoughts Women were consulted during the research		Scientists who have set up the laboratory are engaged in ongoing discussions but they are a partner	
Project HH – Call 6				l
		Capacity building of farmers and partner organisation's network	The local partner is not allowed to manage the grant	

^{*} The definition from the IAP2 for "empower" is "Place final decision making in their hands." Since projects do not typically accomplish this within the lifecycle, it has been modified to suit the circumstances of what is feasible. Hence, "increase their voice to make their broader set of demands known."

Illustrative Quotes

- "The Project Steering Committee is our way of pursuing transparency and accountability. We have an MOU with our NGO partners. We have monthly meetings with partners. Every six months, we have meetings with national level partners. All of this promotes good governance." – DC Partner
- "The project uses participatory strategy. Work we do, includes farmers and farming households at every level. Really participatory project with bottom up strategy. Lots of meetings bringing everyone together beginning with inception workshop, annual meetings, ... We listen to the voices of everyone; farmers' male and female, district agencies, health extension works, people delivering packages. When we have meetings, we bring everybody." Canadian PI
- "We are not clear of what they expect from us and what we are doing well in governance. When project is commercialized, we won't have much control over what they do." Canadian PI
- "The Project is grounded in participative process, including community organization, capacity building, and networking to empower and improve benefits to marginalized groups. It also includes contributions to top-down policies and both horizontal and vertical institutional linkages. Nevertheless, the independent funding from an international entity creates political challenges that need to be managed." Canadian partner
- "In phase two, governance is new. How do we frame our results, what needs to be articulated? It is most definitely there, but we don't talk about it as much yet, as a relatively new thing. IDRC has requested information from GAC to enable us to train new grantees in Phase two on what it means in terms of cross-cutting themes and implementation, though not at results stage." IDRC Staffperson
- "In contrast to the work in gender, I haven't seen or heard much in the areas of environment or governance. I don't think they are really on the radar. Most projects seem to be relatively strong in the use of participatory methods. But this is far short of broader governance issues related, for example, to access to land. This is always a problem with a commodity focus and wanting to go to scale. Are institutional and policy challenges being assumed away'?" IDRC Staffperson
- "Governance became naturally connected to scaling up, but I am not sure this was explicitly." –
 IDRC Staffperson
- "This research does not really advance governance. But the Caricom project had a governance dimension but there were all kinds of governance related challenges. But overall, governance outcomes were not a priority." – IDRC Staffperson
- "Governance is the third and newest cross-cutting theme, to bring a governance analysis and considerations. A governance analysis is undertaken and projects are assessed against them. But participatory approaches are not mandatory, though participatory approaches are preferable. The question is also, empowerment now or later? A political economy analysis is required. Is this undertaken by partners ahead of proposing projects? The technical solutions of the projects are not likely to address issues in countries where a political economy issue is at play. The quality of governance is diverse in all the projects." GAC Staffperson
- "I'm not sure what this means. Governance wasn't really our aim. Organizations did build their capacity in project management, but I'm not sure about governance, or even if the Fund should / could do anything about something that is so embedded in the culture of an organization. I think this is beyond what the Fund can really do." SAC Member

Annex XXXVII. Phase 2 Efficiency: Program Management

Overall, the perspective of surveyed stakeholders is that CIFSRF Phase 2 is efficiently managed, as shown in Exhibit XXXVII.1 below. 40 of 44 respondents (91%) agreed or strongly agreed that CIFSRF was efficiently planned and 42 of 44 respondents (95%) agreed or strongly agreed that CIFSRF was efficiently delivered.

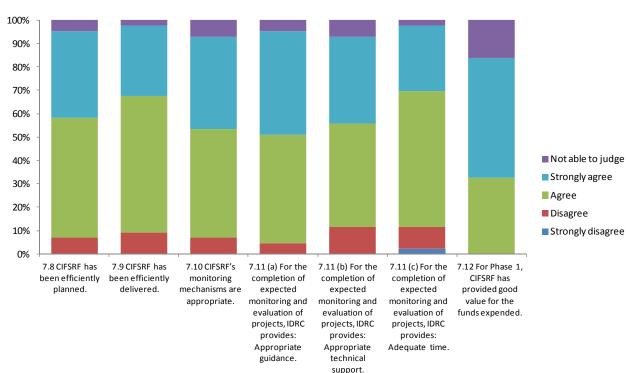


Exhibit XXXVII.1 Universalia Survey Data on CIFSRF's Efficiency for Phase 2

The following analysis elaborates further on key elements of CIFSRF's efficiency, notably: 1) the use of CIFSRF resources and IDRC's delivery of the program on time and on budget, 2) CIFSRF monitoring and evaluation, 3) the Call for Proposals mechanism and 4) CIFSRF's main strengths and weaknesses.

Use of CIFSRF Resources on Time and on Budget

In Phase 2, IDRC staff continues to deliver outputs on budget and on time overall. As the evaluation is being written during Year 4 of CIFSRF Phase 2, all Calls have been launched as was planned for in the Phase 2 Strategic Workplan. Disbursements for Phase 2 were slower than expected, with Call 4 using significantly less funding (\$8.6 million) than the budgeted amount (\$15 million). After Call 5, unused project funds of \$10.5 million remained, so CIFSRF staff launched a 6th Call to disburse the additional funding. 8 projects were funded for a total of \$11.5 million in allocations, \$1 million over budget, in anticipation of expenditure slippage during Phase 2. This allows projects to come in slightly under budget, as was the case in Phase 1, and will likely result in IDRC reaching an overall disbursement rate closer to 100% (the rate was 94.6% for Phase 1).

Similarly to Phase 1, the main concern for the CIFSRF Program with regards to the efficient use of CIFSRF resources was the understaffing of the program. As shown in Exhibit XXXVII.2 below, during Phase 2, CIFSRF had only three full-time staff to manage the 18 projects for which approximately \$89.2 million in funds was disbursed. CIFSRF staff were identified by surveyed and interviewed stakeholders as one of the main strengths of the program. Of the 42 survey respondents from Phase 1, 13 noted that IDRC staff and the support they provided were one the top three main strengths of CIFSRF. As was the case in Phase 1, time constraints have had negative implications for CIFSRF staff during Phase 2. The short and rigid timelines and overlap between Phase 1 and Phase 2, as well as CIFSRF's high touch programming model puts significant stress on staff and requires staff to 'volunteer' time, even with the addition of a new staff member in 2013/2014.

CIFSRF approval requirements from GAC changed in Phase 2, from requiring ministerial approval for project announcements, to a 'non-objection' that could given by the Deputy Minister or Assistant Deputy Ministers, rather than the Minister. This has been a noted improvement of GAC processes that affected CIFSRF.

Staff/Year	2012/13	2013/14	2014/15	2015/16	2016/17 (proj.)	2017/18 (proj.)
Junior & intermediate staff & part-time/full-time	1	1	1	1	1	1
Senior staff & part-time/full-time	1	2	2	2	2	2
Total	2	3	3	3	3	3

Exhibit XXXVII.2 CIFSRF Staffing in Phase 2

Staff worked to smooth the workflow during the transition from Phase 1 to Phase 2. For example, to meet deadlines (and after receiving clearance from Senior Management at IDRC and GAC), Phase 2 work began prior to signature of the Funding Agreement. Similar to Phase 1, for Phase 2, cumulative expenses on staff salaries have slightly exceeded the budget. As of January 2015, CIFSRF had overspent slightly on staff salaries by 6% from the planned budget and underspent on Technical Support (only 12% of planned). For Phase 1, the evaluation team was able to provide an analysis of CIFSRF staff time spent based on data provided in the Annual Reports. However, the formatting for CIFSRF Annual Reports changed, and this data is not available for Phase 2.

During interviews and in the survey, stakeholders raised concerns regarding timing and project completion. 19 of the 39 survey respondents indicated that short timelines are one of the top three weaknesses of CIFSRF. The start of all 8 Call 6 projects was delayed by one month, from October 1st to November 1st 2015. Two projects started even later, one in December 2015 and another in March 2016. End dates for projects were extended to March 2018, meaning that two of the projects will have to be implemented in less than the projected 28-month time period. Concerns regarding timing were echoed in evaluation interviews and the survey responses, however this concern was less pronounced than during Phase 1. 5 of 43 survey respondents (11.6%) indicated that that IDRC did not provide sufficient time for M&E (down from 16% in Phase 1), although this is nowhere near a majority, this was the most negatively scored survey question on CIFSRF's efficiency.

Monitoring and Evaluation

During Phase 2, CIFSRF continued to use the online reporting system that was launched during Phase 1. CIFSRF staff synchronized the timing of technical (and financial) reports from CIFSRF projects to IDRC for when IDRC reports to GAC. This reduced the time required for IDRC staff to prepare reports for GAC and

represents one of the many ongoing improvements made by CIFSRF staff to increase the efficiency of the program.

Surveyed stakeholders expressed mixed opinions regarding CIFSRF's M&E, but overall, were slightly more critical during Phase 2. The number of surveyed stakeholders who disagreed with the statement "For the completion of expected monitoring and evaluation of projects, IDRC provides: Appropriate technical support", increased from 5% (2) in Phase 1 to 12% in Phase 2 (5). 11 of 39 survey respondents noted the M&E requirements as a main weakness of the program. Examples of the mixed perspectives are provided below.

- "CIFSRF's monitoring system is very good and has established a high bar for others in IDRC" IDRC staffperson
- "The reporting requirements are onerous. We spend more time reporting that researching" Canadian PI (academic)
- "Much of what is shared at 6 months and 12 months is repetitive, it could be streamlined" –
 Canadian PI (academic)
- "The information requested compared to other donors is not too onerous at all. It is typical. There is some duplication, but not much." DC PI (development organization)

Another critique of CIFSRF's M&E that was brought to the evaluation team through various interviews was the concern that the collaboration with GAC results in imposing a results-based development measurement model, which is inherently risk averse and less aligned with fostering innovation, on a research program focused on developing new techniques. Stakeholders noted that a results-based measurement model may not fully capture the impact of the program, as the impact is likely to be very long term.

Calls for Proposals

In Phase 2, the Call for Proposals process was implemented by IDRC with an adaptive management approach. Through the implementation of learning from Phase 1 and iterative changes between Calls 4, 5 and 6, CIFSRF implemented and adapted systems to manage the Calls and noted a progressive increase in the quality of Proposals received from CIFSRF's various target audiences and the diversity of implementing partner organizations.

Exhibit XXXVII.3 Calls for Proposals during CIFSRF Phase 2

CALL 4	CALL 5	CALL 6
259 concept notes, 156 shortlisted, 26	16 concept notes, 3 shortlisted, 3 selected	184 concept notes, 9
to the SAC, 9 proposals, 3 selected	8 shortlisted, 4 funded	shortlisted, 8 selected

As CIFSRF received 259 concept notes during Call 4, the program staff held a 4-day, 21-person review session to narrow down from 156 shortlisted Projects to 26 Concept Notes for the SAC. Ultimately, 3 projects were funded. As a result, funding for Call 4 was significantly under budget and the under-use of funds for Call 4 resulted in IDRC going through the additional Call 6. The duplication of the review process, which was lengthy for both Calls 4 and 6, resulted in a greater use of internal resources, which is less efficient. However, it enabled time for a scientific review of a smaller, but stronger group of projects in Call 4 and allowed CIFSRF to test a more business-oriented approach for Call 6, during which there was an increase in the percentage of applications involving the private sector.

In Call 5, a closed Call, two rounds of funding occurred; however, it resulted in a longer application phase. This gap between funding was problematic for Phase 1 grantees. In particular, it was noted in project documents, interviews and the survey that the gap in funding put strain on research partnerships.

Call 6 has the broadest ranges of organizations, as CIFSRF tested a new model involving shorter, smaller projects, with a business case approach. However, due to delays in getting projects approved and started, any further administrative delays could generate constraints to successful completion of Call 6 projects within the Phase 2 timeframe.

Strengths and Weaknesses

The strengths and weakness of CIFSRF's management, identified through interviews and the survey are noted in Exhibit XXXVII.4 below. The evaluation team has categorized the strengths of CIFSRF by People, Processes and Program-related strengths. The weaknesses have been classified by level of urgency, from significant area of concern to low area of concern.

Exhibit XXXVII.4 Strengths and Weaknesses of CIFSRF Management

CATEGORY	STRENGTHS IDENTIFIED BY RESPONDENTS IN INTERVIEWS AND THE SURVEY
People	Staff are committed and hard-working IDRC staff sourced additional resources within IDRC to be able to deliver outputs on time The majority of implementing partners found IDRC staff to be collaborative, supportive and to communicate regularly CIFSRF has provided adequate and appropriate support to partners to conduct project level monitoring and evaluation Strong support for project development
Processes	Call for proposals process implemented with adaptive management approach, highlighting iterative changes, noting a progressively increased quality of proposals from target groups. CIFSRF has integrated learning on program management (e.g. M&E) and improved processes over time New systems and procedures developed for CIFSRF have been taken up more widely in IDRC (e.g. Call process, SAC, GC, PMF)
Program	CIFSRF has delivered significant results given the limited resources available Outputs were delivered on budget and on time, with the exception of several brief project extensions Courage to fund 'cutting-edge' projects and test new methods
URGENCY	WEAKNESSES IDENTIFIED BY RESPONDENTS IN INTERVIEWS AND THE SURVEY
Significant Concern	Insufficient human and financial resources Insufficient resources resulted in significant stress on staff Expectations too high given short timelines, partners reported negative effect on projects
Concern	RBM approach not ideal M&E vehicle for R4D (reporting based on predetermined categories, goal displacement, focus on quantitative outputs, lack of structure for broader learnings, inherent uncertainty of research) Approach has favoured investments in learning and adaption in terms of program management over research for development learning Lack of resources in both IDRC and GAC to reflect, analyse, uptake and share lessons from CIFSRF Frequency and detail of reporting requirements considered significant burden by some implementing partners, particularly academics

URGENCY	WEAKNESSES IDENTIFIED BY RESPONDENTS IN INTERVIEWS AND THE SURVEY
Low Concern	Difficult for some project teams to manage M&E, communications, political advocacy, gender and scaling up—they may not be experts in all subjects
	Staff turnover has affected continuity and communication for some implementing partners
	Lack of widely shared definitions for some key terms (e.g.: 'private sector', 'innovation', 'technology', 'governance', 'applications', 'solutions')

Overall and on balance, the CIFSRF program was positively perceived.

CIFSRF Program Expenses

During interviews, CIFSRF stakeholders suggested that the evaluation team examine the efficiency of the Call for Proposals models, with regards to the program's overhead and administrative costs. However, the Proposal review process is not considered an administrative cost, but rather a programming costs. Exhibit XXXVII.5 below provide a breakdown of CIFSRF expenses per year. CIFSRF complies with the GAC requirement that indirect/overhead costs, "costs that cannot be obviously traced to a specific program/project," remain below 12%. As noted in Exhibit XXXVII.5 below, the administrative cost recovery for CIFSRF has been below 8% each year of Phase 2. In addition, the total funding disbursed purely in research grants, during Phase 2, as of the writing of this report, is 86% of the total expenses. This indicates that CIFSRF is running a very lean and efficient program in terms of their ability to disburse funds with a low overhead.

Exhibit XXXVII.5 CIFSRF Phase 2 Expenses Per Year

Expenses/Year	2012/13	2013/14	2014/15	2015/16
Expenses for funding disbursed (research grants)	11,200,889	15,399,691	13,539,845	15,252,193
Expenses for other programming costs (e.g. peer review, research network development)	208,167	354,851	692,593	178,828
Grand Total	11,409,056	15,754,542	14,232,438	15,431,021
Expenses/Year	2012/13	2013/14	2014/15	2015/16
Salaries and Benefits (IDRC and GAC)	289,726	458,121	646,698	579,069
Office Costs (IDRC and GAC)	28,476	30,836	44,783	48,284
Monitoring and Evaluation (IDRC and GAC)	202,825	129,874	191,093	251,627
Communications and Dissemination (IDRC and GAC)	14,941	18,952	52,573	64,019
Phase 1 Total	535,968	581,740	513,215	
Phase 2 Total		56,043	421,932	942,999
Grand Total	535,968	637,783	935,147	942,999
Admin costs/Year	2012/13	2013/14	2014/15	2015/16
Administrative cost recovery	955,602	1,314,712	1,205,809	1,300,748
Percentage	(7.4%)	(7.4%)	(7.4%)	(7.4%)
Phase 1 Total	955,602	1,293,093	585,078	
Phase 2 Total		21,619	620,731	1,300,748
Grand Total	955,602	1,314,712	1,205,809	1,300,748
Grand Total EXPENSES	12,900,626	17,707,037	16,373,394	17,674,768

Annex XXXVIII. Phase 2 Efficiency: Governance Arrangements

Introductory Note

Much of the evidence reported for Phase 1 is equally applicable to Phase 2. Only Phase 2 differences are reported.

Strengths of the Scientific Advisory Committee

• The gender balance on the SAC improved in Phase 2, from 8 men and 3 women in Phase 1 to 6 men and 5 women in Phase 2.

Weaknesses / Areas of Improvement of the SAC

Same as for Phase 1.

Strengths of the Governance Committee

Differences

- Realizing the need for more diversity, the Governance Committee was opened up to "other government department" candidates and to the Canadian private sector. The GAC and IDRC Cochairs of the GC will prepare the GC's nomination for this position. This nomination would be subject to the approval of the Minister for International Cooperation on a non-objection basis.
- After its endorsement of projects, the Governance Committee, through the GAC Co-Chair, can now seek approval from the Minister of International Cooperation on a non-objection basis. However, other Ministerial approvals did cause delays (see weaknesses below).
- In terms of the Canadian private sector representation on the GC, some have commented that it made for a stronger committee and altered the risk-taking, while others say that the GC still needs experts from the Global South and Canadian civil society.
- As a strength, the GC made an attempt to bring in civil society representatives but it was refused by the Minister's Office.
- The GC has rarely overturned the recommendations of the SAC. One exception in Phase 2 was the GC's approval of the Hexanal technology for fruit preservation, while the SAC was more restrained. That the GC rarely overturns the SAC's recommendations could be viewed as strong in verification but some see it as bureaucratic.
- Gender balance of the GC also improved in Phase 2 from 9 men and 2 women in Phase 1 to 8 and
 5, respectively, in part due to the larger membership.
- A communication strategy was strongly emphasized by the governance in Phase 2.

Weakness of the Governance Committee

Differences

While the GC did bring in Canadian private sector and someone from another government department, comments suggest that more diversity is still needed, with suggestions of civil society, the Global South, trade delegates. One respondent commented that it is not only people who know how to navigate within government, but people with a Southern perspective and people who really understand the innovations being proposed.

- With the change in Government in Canada in 2015 and ministerial approval required for grant agreements pertaining to Call 6 proposals, delays ensued. There was a one-month delay in contacting successful Call 6 projects and a more significant delay in the public announcement of the projects awarded because Ministerial approval was required for this as well (see pp. 11-12 and p. 36 in the Third Annual Report of CIFSRF Phase 2).
- There is evidence from the evaluation team's field visits that community-level beneficiaries have not yet been informed of their inclusion in Phase 2 despite PIs having included them in project plans.

Strengths and Weaknesses of the Governance Arrangements in General

This is in relation to the finding that the governance arrangements have been appropriate to the Fund and favorable to the relationship between the two partner organizations.

Differences

 Comments were also made about the project advisory committee as a good mechanism but with a suggestion to include a socio-economist on the committee.

Weaknesses

Same as for Phase 1.

Illustrative Quotes

- "The GC from the outset included senior representatives from IDRC and GAC. At first, it was a worry for us that CIDA/GAC would seek to micromanage IDRC. But it ended up being extremely useful to position the program in the Canadian government and ensure high visibility and also ensuring Phase 2 overall. This was such a good mechanism that we are pursuing the same arrangements in other partnerships with other government of Canada partnerships and with other donors." IDRC Staffperson
- "IDRC has been given a lot of flexibility and responsibility in terms of management and implementing as well as making decisions about how funds will be disbursed etc. The government of Canada bureaucracy has been challenging." – IDRC Staffperson
- "The oversight has seemed appropriate for the Fund. They have had optimal monitoring and evaluation to ensure accountability and financial reporting has been followed up effectively. Only once there were complaints about how funds were disbursed with one project and it had more to do with technical sloppiness on the part of the partner than financial issues. The Executive Board took it up and dealt with it." IDRC Staffperson
- "Strength is outside expertise that is brought in who are not in government who have brought interesting insight to the program. If anything, sometimes feel like it's too Global Affairs and IDRC heavy. Maybe even at GC we should be thinking about having developing country representatives as we do on SAC. There it's expertise and comes from wherever it comes from and it's hugely valuable. At GC very Canadian focused and sometimes lose perspective on why we are doing what we're doing." GAC Staffperson
- "You don't send ADM and DG to talk about low levels IDRC does things on metrics that are two scales below us. They should sort out activities and then get GC to ask big picture questions. Can we use this for Minister announcement, etc." GAC Staffperson

- "While the SAC was all about scoring Concept Notes and Proposals, the GC has an air of bureaucracy and bureaucratic 'debates.' ... Some of the debates in the GC took far too much time. Instead of 4-5 hours, we could have been done in 2-4 hours. Perhaps this is just the nature of government. But I think that some of the issues that people from IDRC and GAC were discussing, could have been settled bilaterally outside of the GAC. We didn't all need to listen to that." Private Sector Actor
- "Scientific Advisory Committee role has been very useful to guide project managers in the right direction and ensure scientific rigor." – DC PI
- "I would hope there would be greater transparency around the approval process. It remained unclear to me where the decision making lay and how decisions were being taken and very little feedback that could be helpful for future applications. Felt like very secretive process. No transparency around people who were making final decisions, how representative they were of various actors involved in this world, extent to which civil society involved in the process, extent to which civil society is even considered to be important to this work. Would love to recommend much more open and clear selection process." Key External Stakeholder

Annex XXXIX. Phase 2 Recommendations and Operational Implications

'Scaling Up Research' and 'Researching Scaling Up'

Recommendation 1: CIFSRF should advise and support project teams to strategically and effectively build relationships or partnerships with appropriate Canadian and DC actors, intent on a more effective scale up of innovations. Priority Level: 1

Operational Implications

- OI 1.1: CIFSRF to accompany project teams in identifying the scaling up support they need, including training, as well as human and financial resources.
- OI 1.2: Project teams to hire / invest in the right people (e.g. a staffperson and/or consultant) for scaling up their innovations, using financial resources provided by CIFSRF for these purposes.
- OI 1.3: Project teams to (continue to) build the appropriate partnerships and/or relationships for scaling up their innovations.

Recommendation 2: CIFSRF should bolster its efforts and methodologies of 'researching scaling up'. Priority Level: 2

Operational Implications

- OI 2.1: CIFSRF to further develop and implement the 'researching scaling up' methodology.
- OI 2.2: CIFSRF to develop a participatory research and engagement strategy to ensure that all PIs are appropriately involved in 'researching scaling up'.

Recommendation 3: CIFSRF should strategically address the possible integration of CIFSRF results into GAC programming. Priority Level: 2

Operational Implications

- OI 3.1: Determine if the integration of results into GAC programming is a key priority for the remainder of Phase 2.
- OI 3.2: If so, CIFSRF (and particularly GAC) to develop a clear strategy for the integration of results into GAC programming with accompanying and appropriate levels of resources.
- OI 3.3: If so, GAC data requirements for such integration to be further clarified and addressed, to respond to specific GAC strategic, programmatic and operational priorities.
- OI 3.4: If so, CIFSRF (and particularly GAC) to strategically provide support for DC national or regional programming that is being, or has been informed by CIFSRF results, to expand scaling up processes underway.

Recommendation 4: CIFSRF should clarify its strategy, priorities and approaches with respect to each of the three categories of private sector actors: small-scale actors in DCs; national level in DCs; and multinationals. Priority Level: 2

Operational Implications

• OI 4.1: Project partners to be encouraged to continue focusing their energies on building partnership with small-scale and national-level private sector actors.

Support for Learning and Knowledge Spaces

Recommendation 5: CIFSRF should provide support and spaces for cross-project collaboration in documenting and sharing experiences. Priority Level: 1

Operational Implications

- OI 5.1: Thematic foci for knowledge sharing priorities to be elicited via a poll of project partners and relevant stakeholders.
- OI 5.2: An online space to be created for experience-sharing, with project teams delivering regular webinars on issues of particular and common interest (e.g. scaling up, gender, governance).
- OI 5.3: Planning for a series of CIFSRF publications and/or special journal issues on topics of common interest across project teams and IDRC/GAC (e.g. scaling up, North-South partnerships in R4D initiatives).

Awareness and Understanding

Recommendation 6: CIFSRF should implement its communication strategy with a particular focus on target groups that have been reached the least effectively thus far. Priority Level: 2

Operational Implications

- OI 6.1: Create an awareness raising and engagement campaign with Canadian universities (e.g. development studies, food studies, area studies), intent on sharing and deconstructing CIFSRF experiences.
- OI 6.2: CIFSRF should engage in high-level policy debates and meetings on agricultural innovation and FS.

Relevance for Food Security and Primary Beneficiaries

Recommendation 7: CIFSRF should ensure that project benefits accrue *primarily* to key program beneficiaries, namely the poor, small-scale farmers, and especially women. Priority Level: 1

Operational Implications

- OI 7.1: CIFSRF portfolio review of projects, and where necessary, working with select projects to ensure they are realigned with FS priorities of primary beneficiaries.
- OI 7.2: CIFSRF should develop an IPR monitoring mechanism to ensure the IDRC stipulation that "reasonable terms and conditions which promote widespread access" are respected.

Environmental Sustainability

Recommendation 8: CIFSRF should ensure that project results are environmentally sustainable, as per *all* criteria defined in the SEA 2010. Priority Level: 2

Operational Implications

• OI 8.1: CIFSRF portfolio review of projects, and where necessary, working with select projects to ensure they are realigned with environmental sustainability priorities.

Good Governance

Recommendation 9: CIFSRF should ensure that greater understanding is acquired across projects on matters of good governance. Priority Level: 2

Operational Implications

• OI 9.1: Guidance provided to grantees on good governance issues, advising them of what performance in this cross-cutting issue looks like and under what conditions.

Efficiency: Program Management

Recommendation 10: CIFSRF should ensure that M&E needs, requirements and processes are equally clear and feasible for all. Priority Level: 1

Operational Implications

- OI 10.1: A process should be initiated towards ensuring that GAC needs with regards to CIFSRF M&E systems are reasonably addressed.
- OI 10.2: Ways sought to simplify reporting and reduce the burden of reporting on project teams
- OI 10.3: Supplementary guidance provided to Call 6 projects on reporting, based on a poll of Call 6
 PIs, intent on ascertaining specific needs for support.

Recommendation 11: CIFSRF should undertake a summative evaluation of Phase 2, including a metaanalysis of projects that have received *both* Phase 1 and Phase 2 funding, with a particular emphasis on program and project outcomes. Priority Level: 2

Operational Implications

• OI 11.1: Planning for the summative evaluation (based on DAC-EOCD principles) to be pursued with enough lead-time for evaluators to ensure a timely and comprehensive delivery.

Annex XL. Evaluation Methodology

Overview and Overall Approach

The evaluation approach was shaped by the nature of the task as a program-level evaluation. It had both accountability-focused summative dimensions, as well as formative dimensions that focussed on learning. As noted in the Terms of Reference (ToR – see Annex XLIII), the overall emphasis of the evaluation was on determining the effectiveness, efficiency, relevance and sustainability of the Canadian International Food Security Research Fund (CIFSRF) Phase 1 and Phase 2, and to provide strategic recommendations and lessons for the future of the CIFSRF program.

The evaluation matrix (see Annex XLI) served as the integrating framework for the evaluation. It illustrates how the various lines of inquiry with their respective data collection methods and tools were used and triangulated to address the evaluation questions and sub-questions.

The evaluation team's overall approach was guided by principles of utilization-focused evaluation, participation and gender equality, and took the standard Organization for Economic Co-operation and Development – Development Assistance Committee (OECD-DAC) evaluation criteria into account.

Utilisation Focus

Universalia is a strong proponent of the utilisation-focused approach and its underlying principles, which have guided our evaluation work over the last decade. Thus, based on OECD-DAC's Evaluation Quality Standards and Guidelines, as well as the International Development Research Centre's (IDRC) Evaluation Principles, we designed and conducted the CIFSRF evaluation to respond to the primary users' needs and/or objectives (i.e. geared to the Governance Committee, CIFSRF management, IDRC staff, project partners and other key stakeholders, including beneficiaries). Our utilisation-focused approach saw us design the evaluation and workplan based on its purpose, objectives and uses, intent on favouring the uptake of recommendations. We aimed to develop recommendations that are relevant, useful and feasible. A specific focus on possibilities and strategic directions for the "up-take of research into development programming and private sector investment" was also maintained.

Principles of Participation

The RFP for this assignment, while not explicitly stating so, implied an evaluation design and process that was to be appropriately participatory and consultative in nature, given the multi-partner nature of the Fund. Throughout the mandate, we worked closely with IDRC and a broad spectrum of stakeholders, eliciting their views and perspectives, while promoting a sense of ownership and trust in the evaluation. The evaluation team sought to systematically and constructively engage with the various stakeholders to ensure that conclusions and recommendations that were formulated following data collection were useful, while maintaining the independence and objectivity of the evaluation.

During the Inception Stage, the evaluation team worked closely with IDRC and Global Affairs Canada (GAC) on methodological and work plan development over the course of a 3-day inception workshop from 9-11 March 2016. An Interim Progress Report was submitted to IDRC on 5 May 2016, keeping the CIFSRF team informed of progress and providing an opportunity for feedback to the evaluation team. A presentation of preliminary findings was made by the evaluation team to IDRC on 25 May 2016, upon completion of data collection and field missions to elicit stakeholder feedback on draft deliverables.

Evaluation team members strove to conduct data collection in ways that were appropriate to the respective geographic and cultural backgrounds as well as gender diversity of different respondents. The evaluation ensured the privacy of evaluation respondents, and treated their specific contributions

confidentially - for example, by reporting the results of stakeholder consultations only in aggregated form or, in quotes, indicating only the stakeholder group but not their names.

Gender equality perspectives were integrated and reflected in the evaluation questions and indicators as shown in the evaluation matrix, as well as in data collection tools. Gender considerations were further applied throughout the process of data analysis and reporting. The evaluation team itself was gender balanced, and several team members possessed in-depth expertise and experience on gender equality and on conducting gender responsive evaluations.

Light Evaluability Assessment

The evaluation of CIFSRF has called for a 'light evaluability assessment,' which was undertaken by the evaluation team as part of the inception process, based on an evaluability checklist. The evaluability checklist included key questions about project design, information availability and institutional context. A response to each of the questions in this checklist allowed the evaluation team to assess the program's evaluability. Overall, the evaluation team assessed and then concluded that the CIFSRF program is evaluable. The most significant recognized challenge stemmed from the time constraints of this assignment.

Mixed-Method Approach

The evaluation team used a mixed-method approach with each of the complementary methods outlined below informing different components of the evaluation. These are matched closely with specific evaluation questions and sub-questions in the evaluation matrix. The matrix is based fundamentally on the research questions and sub-questions articulated in the RFP, and developed further throughout the inception process (see Annex XLI).

Assessment of Cross-Cutting Issues

CIFSRF has been designed to both be sensitive to, and advance a number of cross-cutting issues, including gender equality, environmental sustainability and governance.

Pursuing a *gender sensitive* approach to this mandate, we assessed the extent to which, and the strategies through which gender has been strategically integrated into all stages of CIFSRF programming; assessed the outcomes of CIFSRF activities on both women specifically; sought women as research participants to ensure their equitable participation in interviews and focus group discussions (FGD).

On *environmental* sustainability, we assessed the extent to which, and the strategies through which it has been integrated into all levels of CIFSRF programming; assessed the outcomes of CIFSRF activities on the environment, in relation to climate change, land, water and sanitaiton, and/or urbanization, as appropriate.

In terms of *governance*, we examined CIFSRF outputs and outcomes based on the Fund's priorities, reflecting those of GAC; assessed if, how and the extent to which the Fund has empowered developing country actors to define and address their food security priorities; made evident the governance-related effects of the research-based interventions that have been supported.

Data Collection Methods

Following the assignment launch mid-February, a three-day inception meeting was held in Ottawa with key IDRC and GAC staff, 9-12 March 2016. After this meeting, the evaluation team applied the following lines of inquiry for data collection: (a) document review; (b) key informant interviews; (c) 6 project site and virtual visits; and (d) an electronic survey of Canadian and developing country (DC) Principal Investigators. The specific methods for data collection are described below.

Document Review

Documentation relevant to this assignment was ample and diverse. A program and project portfolio review, including the Fund's database was conducted as part of the Inception Phase. Our document review examined IDRC documentation (institutional, program, project, evaluation and others) and relevant documents from partner organizations, selected from the list of documents compiled by CIFSRF for the evaluation team. Additional corporate documents were systematically analysed to address the questions and sub-questions in the evaluation matrix. A full bibliography is included as Annex III.

Interviewing and Focus Group Discussions

Semi-structured interviews (videoconferencing, phone and/or face-to-face) were undertaken with key CIFSRS stakeholders and beneficiaries, including IDRC staff, Canadian partners and developing country partners; relevant private sector actors, Canadian and developing country government employees, and community-level beneficiaries, as per the overall sampling strategy.

Focus group discussions (FGD) were undertaken with key CIFSRF beneficiaries in sampled coutries. The evaluation team was intent on informing the evaluation with the experiences of community-level actors, notably small-scale farmers and women farmers in particular.

The evaluation team conducted individual and small group interviews (by telephone, Skype and in person where feasible) as well as FGD with a total of 252 selected global stakeholders. Exhibit XL.1 presents a breakdown of interviews, small group interviews and FGDs by stakeholder group.

Exhibit XL.1 CIFSRF Evaluation – Number of Stakeholders Interviewed

UNIT OF ANALYSIS	SAMPLING STRATEGY PREVISION	NUMBER OF STAKEHOLDERS ENGAGED DIRECTLY
IDRC Staff (Headquarters)	12	11
IDRC Staff (Regional offices)	15	10
Global Affairs Canada	12	14
Governance Committee	7	9
Scientific Advisory Committee	7	9
Embassies/High Commissions	6	8
Canadian Partners*	39	22
Developing Country Partners*	39	52
National Authorities, Developing Country	6	9
Sub-National Authorities, Developing Country	6	18
Private Sector	4	10
Community-Level Beneficiaries	18	72 (with 15 FGD)
Key External Informants	18	12

The Interview Guide and Informed Consent

The evaluation team developed an interview guide that listed the interview and FGD questions, and included a confidentiality statement and request for informed consent. The interview guide is included as Annex XLIV.

Informed consent was obtained orally from stakeholders before every interview. Each interviewee was made aware that their responses would be shared with the evaluation team. Interviewees were told they might be quoted in the report, but that any information included in the final report would not identify them as the respondent. Interviewees were also informed that they would be named as a key informant in the final report, and asked to confirm their acquiescence. A full list of stakeholders consulted, and for whom informed consent as described was secured, is included in Annex XLII.

Field Visits

During March and April 2016, the evaluation team conducted field visits in six countries across Asia, Africa, and Latin America and the Caribbean in order to review 14 projects (8 Phase 1 projects and 6 Phase 2 projects). 7 projects were in Africa, 4 in Asia, and 3 in Latin America and the Caribbean.

Countries and projects were selected based on a country/project sampling analysis, informed by discussions with IDRC and GAC. Criteria used in the selection of countries and projects included: amount of funding spent; a balance between Phase 1 and/or Phase 2, including projects which cross both phases or were only involved in one or the other; regional projects as well as a balance of regions based on total investment per region; Phase 1 projects not visited during the Phase 1 mid-term evaluation (MTE); projects which have performed particularly well or have been confronted by notable challenges; thematic representation; projects with a diversity of scaling-up pathways; 'high-tech' / 'low-tech' projects; accessibility. Exhibit XL.2 presents a full list of sampled countries and projects.

Each country visit lasted up to 10 working days in the field. The visits to Cambodia and India also involved the evaluation team's attendance at a Scaling-Up Workshop (Cambodia, 29-31 March 2016), and a Millet Mill Inception Workshop (India, 4-6 April 2016). It should be noted that the Millet project was not a fully sampled project, but was lightly review by the evaluation team. Additionally, the evaluation team participated in a Presentation of Ethiopia Chickpea/Crop Production/Nutrition/Technology Project at Global Affairs Canada – Ottawa, Canada on 7 April 2016.

Exhibit XL.2	Sampled	Countries/	Projects	
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CONTINENT	COUNTRY	PROJECT	PHASE
Africa	Africa Ethiopia	Improving Food Security in the Highlands of Ethiopia through Improved and Sustainable Agricultural Productivity and Human Nutrition (106305)	Phase 1
	Improving Nutrition in Ethiopia through Plant Breeding and Soil Management (106927)	Phase 1	
		Promoting Adoption of Chickpea Technologies in Southern Ethiopia (107540)	Phase 1
		Scaling-up Pulse Innovations for Food and Nutrition Security in Southern Ethiopia (107984)	Phase 2
	Kenya	Development of a Vaccine for Eradicating Contagious Bovine PleuroPneumonia in Africa (106929)	Phase 1

CONTINENT	COUNTRY	PROJECT	PHASE
		Development of a Subunit Vaccine for Contagious Bovine Pleuropneumonia in Africa (107849)	Phase 2
		Farm Shop: Scaling Access to Agricultural Inputs in Kenya (108126)	Phase 2
Asia Cambodia	Nutrition from aquaculture and home gardens in Cambodia (106928)	Phase 1	
		Scale up of Homestead Food Production for improved household food security and nutrition in Cambodia (107982)	Phase 2
India		Reducing fruit losses in India and Sri Lanka using nanotechnology (106931)	Phase 1
		Enhanced preservation of fruits using nanotechnology (107847)	Phase 2
Latin America and the Caribbean	Bolivia	Food Security, Fisheries and Aquaculture in the Bolivian Amazon (106524)	Phase 1
		Amazon Fish For Food (107985)	Phase 2
	St. Kitts and Nevis	From Farm to Fork: Improving Nutrition in the Caribbean (106525)	Phase 1

Virtual Visit

The planned field visit to Ethiopia was not undertaken, a matter that was communicated to CIFSRF in a timely and transparent way. It was instead replaced by a "virtual field visit" with key stakeholders in Ethiopia. In the Risk and Mitigation Strategies Section 6.3 of the Inception Report, the evaluation team had indicated that "[I]nsecurity or health hazards in certain countries puts data collection activities at risk", seeing this as a "Low-Medium Risk", with a "High" potential impact. The following Mitigation Measures were identified: "Consideration of security issues when conducting evaluability assessment and sampling of potential countries to visit, especially in the Sahel (armed groups) and Latin America (Zika virus). Monitoring of the security situation with Canadian and UN agencies and before and during data collection."

In the case of Ethiopia, the evaluation team had closely monitored the political and security situation which included a Canadian government travel advisory on non-essential travel to Ziway Woreda and Adami Tulu, which are both on route to Hawassa (the location for several interviews, and the base for field visit sites). In discussion with the Ethiopian Principal Investigator, it was noted that the alternate route had also experienced security "problems". The Canadian embassy in Addis Ababa confirmed this information. The decision was taken that the evaluation team member, Ms. Anna Paskal, would travel to the capital, and based on additional sources of information in country, continue to assess the safety of travel until the very moment of further internal travel.

The security concerns were coupled with an untimely illness of our team member, which prohibited her from traveling (this is supported by appropriate medical documentation). It was decided that rather than reschedule a field visit with another team member, a "virtual field visit" would be pursued. All planned interviews with key stakeholders were conducted by phone and/or videoconference. FGDs were not undertaken due to timing constraints (the Ethiopian team was not available to organize the focus groups within the set time frame for data collection).

Overall, the evaluation team was confident that the data collected in Ethiopia was fully appropriate to the analytic task at hand. There were no negative implications for the evaluation of having undertaken the data collection in the manner outlined above.

Online Survey

A global on-line survey was administered in April 2016 with all Canadian and developing country Principal Investigators (PIs) in English and French to ensure the highest possible response rates. The survey was taken by 75 Phase 1 and/or Phase 2 Principal Investigators, both women and men. Given the total of 137 PIs, this represents a response rate of 55%.

The survey was crafted to elicit valuable data from survey participants on the key areas of the evaluation, itself then easily compiled into statistically significant and useable information. We treated survey data using technological tools for such purposes while also being examined interpretively by the evaluation team. Most survey questions were based on standard Likert Scale methodology, with the opportunity for open-ended or 'write in' responses from survey participants.

Survey questions and results are included as Annex XLV.

3. Data Analysis

An evaluation of such a complex program required multiple analysis methods to ensure that all components were appropriately and comprehensively addressed and to provide for adequate validation and triangulation. The use of mixed methods and triangulation enhanced the credibility of findings.

To analyse data, qualitative and quantitative techniques were employed. The evaluation team conducted contextual analysis, descriptive analysis, interpretive analysis, and comparative analysis of qualitative and quantitative data collected, as applicable. Thematic analysis includes: i) partnerships and network analysis; ii) efficiency analysis, and iii) cross-cutting thematic analysis.

Triangulation was used to ensure the reliability of information and to increase the quality, integrity and credibility of the evaluation findings and conclusions. The evaluation team based individual findings on multiple lines of inquiry and data sources.

Reporting

Draft findings, conclusions and emerging themes for recommendations were presented in a PowerPoint presentation to CIFSRF on 25 May 2016. CIFSRF participants provided feedback, comments and suggestions that informed the draft evaluation report. The draft report was submitted on 15 June 2016.

The evaluation team conducted a detailed analysis of CIFSRF projects, but in order to elevate the analysis and emphasize program-level conclusions and findings, all projects were given a code nby the evaluation team. Where appropriate, projects are referenced by their evaluation code rather than their IDRC project name or number.

Incorporating feedback from CIFRSF (including both IDRC and GAC), the final report was submitted on 1 August 2016, as contractually agreed. The final report also included all Annexes, including full results of the online survey.

Exhibit XL.3 outlines the assignment schedule, activities, and key milestones and dates.

Exhibit XL.3 Schedule, Activities, Milestones and Dates

Activity	Dates	Milestone
RFP Closing	February 1, 2016	
Initial documentation and access provided to	By February 26, 2016	
evaluators		
Evaluators submit proposed draft work-plan and	By March 15, 2016	-Work plan
evaluation framework		-Evaluation framework
IDRC provides feedback on proposed work-plan	By March 31, 2016	
and evaluation framework (as needed), and		
approves final product.		
Evaluation underway: Evaluators conduct data	April 1 – July 29, 2016	
collection, visits, interviews, analysis, report		
writing, etc. (as needed)		
Mid-point progress update submitted to IDRC	May 1, 2016	Progress report
Presentation of consolidated data and draft	May 25, 2016	Presentation
findings		
Evaluators submit draft report on its first stage	June 15, 2016	Draft report
findings to IDRC.		
Comments on draft evaluation report provided to	July 1, 2016	
evaluators by IDRC.		
Evaluators submit final report to IDRC	August 1, 2016	Final Report

Quality Assurance

The internal and external quality assurance methodologies and processes presented in the Inception Report were strictly applied to the assignment.

Quality Assurance: Methodology

Through consultative processes, Universalia developed a detailed evaluation methodology and matrix that were submitted to IDRC for review and approval. It specified the purpose and context of the CIFSRF Evaluation; the specific objectives and criteria that would be used, the sources of information that would be used to triangulate and cross-validate data; and any underlying assumptions.

In view of the desire to ensure a participatory approach, CIFSRF was given the opportunity to comment on a progress report, draft findings, conclusions, recommendations, and lessons learned, and the final evaluation report reflects their corrections and comments, while acknowledging any substantive disagreements.

Quality Assurance: Management

Universalia's project management approach allowed us to effectively manage this complex study.

Leadership and accountability: Dr. Eric Abitbol, the overall Team Leader for this assignment, was responsible for ensuring that quality control was exercised throughout the process and that all work products and deliverables met the highest professional standards. Dr. Charles Lusthaus assumed the role of Internal Quality Assurance Reviewer. Dr. Howard Elliott was the External Quality Assurance Reviewer. In their capacities, neither contributed to data collection, analysis or report writing. They focused exclusively on quality assurance of key evaluation deliverables, directly advising and informing the work of the evaluation team. Specifically, they informed the evaluation design and methodology, and each of the deliverables ahead of submission to IDRC.

- The external evaluation team members: The core team of consultants had the educational qualifications, skills, thematic knowledge and experience to design, conduct, and manage an independent evaluation. All team members were sensitive to cultural and gender considerations, and understood the importance of protecting the anonymity and confidentiality of informants.
- Administrative team: Universalia's administrative team of project and finance officers, logistics and administrative staff in Montreal have all been with Universalia for at least five to 10 years. They have the proven capacity to support the efficient management of multiple project activities.
- **Financial management and accounting systems**: Universalia's integrated financial accounting system (Epicor) includes a report writer, general ledger, accounts payable, and accounts receivable modules, and a web-based time and expense sheet software (Star Web).
- Project management system: Universalia's project management software (Star Projects) has allowed us to: produce financial statements in accordance with generally accepted accounting principles; manage our operations, produce client billings, and pay suppliers on a timely basis; and monitor and track hours and costs incurred on projects.
- Information Technology (IT): Universalia has invested heavily in its IT infrastructure and equipment. Day-to-day maintenance of our IT infrastructure has been outsourced to an IT provider, thus ensuring 24/7 coverage and access to the latest technologies. Recently we established a global video conferencing facility that enables us to offer clients and stakeholders real-time interactivity, thus strengthening the sensitivity and overall responsiveness of our approach.

Limitations

The time available for the overall evaluation was very limited given the scope of work required. While this had relatively few implications for the assignment, a few minor points are noteworthy.

The evaluation team had planned to undertake 6 field visits, but, as explained previously, in the end 5 were carried out in the field and one (Ethiopia) was carried our virtually. Also, FGDs were anticipated for all site field visits, but only 4 were carried out. It was impossible to organise FGDs in St. Kitts and Nevis and in Ethiopia.

Given the time constraints, field visits were largely undertaken very early in the process, prior to much document review or high-level stakeholder interviewing (e.g. with IDRC and GAC). This posed a limitation on the evaluation team's ability to cross-check high-level perspectives with those of DC stakeholders and community-level beneficiaries. Finally, the evaluation was constrained by the lack of independent evaluations of CIFSRF supported projects.

Despite these limitations, the evaluation team is confident that the overall report is rooted in appropriate, sufficient and robust data.

Annex XLI. Evaluation Matrix

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
Percieved1. SUMMATIVE EVALUATION OF PHASE 1	1.1 Effectiveness	1.1.1 To what extent has the CIFSRF Phase 1 achieved the expected immediate outcomes (and made progress towards the ultimate outcome) as per the Logic Model	effectively harnessed Canadian expertise and improved capacity of Canadian-developing country partnerships to conduct applied research on food security issues (agricultural productivity and nutrition) and disseminate research results in the developing world?	 Number of CIFSRF funded partnerships that effectively field-test solutions in the developing world during the period of their projects. Added by evaluation team Initiation of the partnership Evolution of Partnership over time Involvement of Canadian and developing country researchers and graduate students Perceived appropriate collaborative planning of projects Perceived quality of information-sharing among partners Collaborative monitoring of projects Evidence of partners expressing a high level of efficiency and usefulness in their partnership by the end of Phase 1 Perceived value of Canadian expertise and overall contribution, by Canadian and developing country partners 	 Document review, including CIFSRF Progress Towards the CIFSRF PMF (in Final Phase 1 Report 2015) Key informant interviews Focus groups Survey

² These indicators are for guidance purposes as the evaluation team plans to address the questions and sub-questions. They will not necessarily all be included in the final report.

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
				 Perceived value of developing country expertise and overall contribution, by Canadian and developing country partners 	
			1.1.1.2 Has CIFSRF Phase 1 effectively generated new knowledge of environmentally sustainable food security and nutrition solutions that benefit subsistence farmers (particularly women)?	 Number of new (field-tested), solutions developed by the end of the CIFSRF Number and quality of livelihoods benefits generated (such as new varieties, new vaccines, new management practices) generated by CIFSRF projects to increase food production while enhancing the resilience/ adaptive capacity of food production systems. Proportion of the projects that have published their results in scientific literature, news papers and other media outlets by the end of the CIFSRF Added by evaluation team Perceived relevance of these livelihood benefits by end users, notable subsistence farmers (particularly women) Evidence of adoption by farmers and/or extension services and/or other relevant users/beneficiaries 	 Document review, including CIFSRF Progress Towards the CIFSRF PMF (in Final Phase 1 Report 2015) Literature Review Key informant interviews Survey
			1.1.1.3 Has CIFSRF Phase 1 effectively improved the ability of developing country organizations involved in the research to implement and	 New food security activities developed by developing country partner organizations for women farmers as a result of the CIFSRF 	Document reviewKey informant interviewsSurvey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
	AREA QUESTION		support environmentally sustainable food security solutions, with a focus on women and women farmers?	 Number and quality of women and men trained to support project beneficiaries and researchers to implement and support CIFSRF solutions Added by evaluation team Resources (budget, staff) allocated to inclusive food security R&D Evidence of new partnerships established for inclusive food security R&D Perceived improvements due to training provided through CIFSRF Ongoing support provided through CIFSRF to grantees 	
			 1.1.1.4 Has CIFSRF Phase 1 effectively improved awareness and understanding of potential application-ready solutions to food security issues in developing countries? among policy makers the development assistance community the general public in Canada and developing countries 	 Tracked by IDRC Evidence of number of projects funded by CIFSRF consulted by development assistance community and developing country policy makers regarding potential application-ready solutions to food security issues in developing countries Evidence of number of uptake cases inside Canada (including within CIDA, IDRC, Canadian NGO community, Canadian policy makers, university teaching curricula and research agendas). Added by evaluation team A sample of developing-country policies & programs specifically initiated or modified with inputs from 	 Document review Media analysis Key informant interviews

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)	
				 CIFSRF projects A sample of policy- or publicawareness-oriented events in which project staff participated A review of press releases, radio spots & other public awareness tools used to disseminate project results to public & policy makers Evidence of new or deepened relationships stemming from awareness of, or more direct engagement with CIFSRF 		
		1.1.2 Were there significant unintended results, either positive or negative?		This will be based on material collected for questions spanning the range of the evaluation.	Document reviewKey informant interviewsFocus groupSurvey	
	1.2 Efficiency ³	imp CIF: eco its _I	1.2.1 Was the implementation of the CIFSRF efficient and economical, relative to its purpose and intended outcomes?	1.2.1.1 Were IDRC and Global Affairs resources (e.g. staff) used efficiently to manage program (and the projects)?	 Added by evaluation team Cost of managing the fund as compared with funds disbursed, in line with commonly accepted parameters 	 Document review Key informant interviews (especially high-level IDRC & GAC staff & high-level decision makers)
			1.2.1.2 Was the call for proposal process efficient to reach targeted audiences?	 Added by evaluation team Evidence of reach (e.g. in terms of number and proportion of applicants and/or grantees of all categories of stakeholders) Evidence of number & type of organization that submitted concept 	Document reviewKey informant interviewsSurvey	

³ Universalia will conduct an efficiency analysis based on existing documentation and standard procedures.

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
				notes, in relation to goals Timeliness of calls for proposals Perceived fairness of process Inefficiencies in call for proposal process	
			1.2.1.3 Were outputs being achieved on time and on budget?	Added by evaluation teamTimelinessOn budget	Document reviewKey informant interviews
		1.2.3 What have been the strengths and weaknesses of the program's management?		 Evidence of good practice (clear theory of change strategy, adequate plans and systems, etc.) Availability of reliable data through the existing M&E system Coherence and alignment of project and program level monitoring Extent and quality of relationship between IDRC and GAC (e.g. on joint monitoring) 	 Document review Key informant interviews Survey
		1.2.4 What have been the strengths and weaknesses of the program's governance arrangements?		 Added by evaluation team Appropriateness of roles and responsibilities of Governance Committee Appropriateness of roles and responsibilities of Scientific Advisory Committee Extent and perceived quality of relationship between IDRC and GAC Role of IDRC in preparation of proposal/project preparation and project approval 	Document review Key informant interviews

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
	1.3 Relevance	1.3.1 To what extent are CIFSRF Phase 1 results relevant?	1.3.1.1 To the food security needs of the poor (particularly small scale farmers and women) in developing countries?	 Degree of involvement of the poor in project formulation / design / implementation Evidence that results have responded to an expression of need and demand Evidence that projects are based on sound analysis of food security needs of the poor Evidence of results utilized by the poor (particularly women) / Evidence of applications of new solutions (particularly by women) Evidence of food security benefits for the poor Evidence of number or results used by institutional actors in attempts meet food security needs of the poor Evidence of project outputs on trajectory to contributing to national food security goals 	 Document review Key informant interviews Focus groups Survey
			1.3.1.2 To Canadian international development policy and programs?	 Added by evaluation team Evidence of results used by Canadian actors Evidence of results which have influenced Canadian actors Results consistent with Canadian development policies Results a high priority to GAC and its country programs GAC representative involvement in design and governance of the fund 	 Document review Key informant interviews Survey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
			1.3.1.3 To private sector priorities?	 Added by evaluation team Interest expressed by private sector actors in program outputs Involvement of private sector actors in selecting projects Evidence of results used by private firms (producers, processors, market agents etc.) 	Document reviewKey informant interviewsSurvey
		1.3.2 How did CIFSRF Phase 1 contribute to general thinking and debates on Food Security (Innovation in agriculture)?		 Added by evaluation team References to CIFSRF strategies, projects, or results in recent food security documents & debates Citations of CIFSRF publications in other academic articles 	 Document review (especially project folders containing research outputs) Literature review Key informant interviews Survey
	1.4 Sustainability	1.4.1 What is the likelihood that results/benefits will continue now that Phase 1 is finished?		 Evidence of projects, or components, that have continued into Phase 2 & their trend (up or down) Projects, or components, that have continued without Phase 2 funding Trend in use of results (up- or downscaling) Challenging having faced Phase 1 projects and responses by Pls 	 Document review Key informant interviews Survey Focus groups
		1.4.2 To what extent does Phase 2 provide an adequate and appropriate intervention to help ensure sustainability		 Added by evaluation team Evidence of cases where Phase 1 initiatives were embraced or supported in Phase 2 (& in what way) Evidence of performance of projects receiving long-term vs. short-term 	Document reviewKey informant interviewsSurvey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
		of Phase 1 results?		 support (i.e. only for Phase 1 vs. Phase 1 & 2) Criteria, decisions and strategies of Pls for pursuing continued support Perception of key stakeholders 	
		1.4.3 Besides CIFSRF Phase 2, are there other committed financial and human resources to maintain benefits and results of Phase 1?		 Added by evaluation team Evidence of budgetary & institutional support for Phase 1 project, during & after CIFSRF support Extent of community-based investment and involvement in perpetuating Phase 1 benefits and results New funding or investors supporting work 	 Document review Key informant interviews Survey Focus groups
		1.4.4 How have results of the research been integrated into Global Affairs programming?		 Added by evaluation team Evidence of number of cases where project strategies or results have been used in, or influenced, GAC policies or programs 	Document reviewKey informant interviewsSurvey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
	1.5 Cross- cutting Issues: Gender Equality	1.5.1 What were the strengths and weaknesses of the design and implementation of the Fund's gender equality strategy?		 Added by evaluation team Existence of a gender strategy Evidence of extent to which gender has been strategically integrated into all stages of CIFSRF programming Strategies through which gender has been strategically integrated into all stages of CIFSRF programming Availability of resources for the pursuit and implementation of the gender strategy Outcomes of CIFSRF activities on women specifically 	 Document review Key informant interviews Survey Focus groups
		1.5.2 Has CISFRF Phase 1 contributed to improving women's decision-making, access to and control of resources? ⁴		 Added by evaluation team Perception of beneficiaries, women in particular but also men Evidence of women's economic development and empowerment stemming from CIFSRF projects 	 Document review (e.g. stories of change) Key informant interviews Survey Focus groups
	1.6 Cross- cutting Issues: Environmental Sustainability	1.6.1 What were the strengths and weaknesses of the design and implementation of the Fund's environmental strategy?		 Added by evaluation team Existence of an environmental strategy Examination of components of the Fund's environmental strategy (e.g. Strategic Environmental Assessment) Evidence of extent to which which environmental sustainability has been integrated into all levels of CIFSRF programming 	 Document review Key informant interviews Survey Focus groups

 $^{\rm 4}$ Data available per project but not at program level/tracked with indicators.

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
				 Strategies through which environmental sustainability has been integrated into all levels of CIFSRF programming Availability of resources for the puruit and implementation of the environmental strategy Outcomes of CIFSRF activities on the environment 	
		1.6.2 What were the positive and negative results of CIFSRF phase 1 in terms of environmental sustainability?		 Added by evaluation team Review of expected outputs based on environmental criteria Perceptions of Pls Perceptions of beneficiaries Perception of other key stakeholders 	 Document review Key informant interviews Survey Focus groups
2. FORMATIVE EVALUATION OF PHASE 2	2.1 Effectiveness	2.1.1 Is the CIFSRF Phase 2 on track to meeting the expected immediate and intermediate outcomes as per the Logic Model?	2.1.1.1 Is CIFSRF Phase 2 on track to effectively increase the use of Canadian expertise and knowledge in food security related science and technology in order to strengthen Canada's contribution of solutions that increase food security in a lasting and significant manner?	 Added by evaluation team Project start-up has been timely Involvement of Canadian and developing country researchers and graduate students Canadian expertise if clearly in evidence as value-added contribution Projects have adequate strategies for using Canadian knowledge & resources Evidence that capacity of partnerships has been increasing Evidence that new knowledge is being generated Evidence that ability of partners to undertake research has been improving 	 Document review Key informant interviews Survey Focus groups

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
				 Projects have plausible program theories (logic models and theories of change) for accomplishing relevant food security goals Evidence of progress being made 	
			2.1.1.2 Is CIFSRF Phase 2 on track to consolidate and scale up the best innovations and technologies from Phase 1?	 Added by evaluation team Projects have taken up the best innovations from Phase 1 Projects have plausible program theories & effective strategies for consolidating & scaling up the innovations from Phase 1 Involvement of government actors in scaling up strategies (relevance, motivation, capacity, contribution) Involvement of civil society actors in scaling up strategies (relevance, motivation, capacity, contribution) Involvement of third parties in scaling up strategies (relevance, motivation, capacity, contribution) Involvement of private sector actors in scaling up strategies (relevance, motivation, capacity, contribution) Training up strategies (relevance, motivation, capacity, contribution) Training provided through CIFSRF Ongoing support provided through CIFSRF Availability of financial resources for scaling-up Evidence of progress 	 Document review Key informant interviews Survey Focus group (Canada)

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
	AREA QUESTION	2.1.1.3 Is CIFSRF Phase 2 identifying new innovations and technologies with potential for effectively scaling up their use into development outcomes with a portfolio of projects that tests and will ultimately document good practices for scaling up research innovations into use?	 Evidence of projects testing innovations with high potential for scaling up & benefits for the poor Evidence of projects testing plausible program theories & strategies for scaling up Evidence that projects & the Fund have adequate strategies for systematizing & documenting effective scaling-up strategies Effectiveness of call for proposals as compared with an approach based in defining outcomes and finding projects to support 	 Document review Key informant interviews Survey Focus group (Canada) 	
			2.1.1.4 Is CIFSRF Phase 2 effectively on track to use the results of research to contribute to more informed and better public policies related to food security and nutrition in developing countries?	 Number of inquiries made to the projects partners, and to IDRC regarding research applications and solutions to food security issues in developing countries Number of references to CIFSRF in the media Number of large knowledge sharing events/activities organized by project partners and the CIFSRF program targeting the general public, research users, and policy makers. Number of food security policies, plans, and programs at the national, regional and global levels that refer to, reflect, or use the results of CIFSRF 2 funded research. Number of people in public and 	 Document review Key informant interviews Survey Focus group (Canada)

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
				private sector organisations (not directly involved in the project) who are taking up project solutions. Added by evaluation team • Projects / the Fund have plausible program theories & adequate strategies for influencing policies for food security & nutrition in developing countries • Evidence of institutional capacity of Fund and partners to influence and inform public policies	
			2.1.1.5 Is CIFSRF Phase 2 effectively on track to use the results of research to contribute to more informed and better programming related to food security and nutrition in developing countries?	 Number of food security policies, plans, and programs at the national, regional and global levels that refer to, reflect, or use the results of CIFSRF 2 funded research. Number of people in public and private sector organisations (not directly involved in the project) who are taking up project solutions. Added by evaluation team Projects / the Fund have plausible program theories & adequate strategies for influencing programming in development agencies & developing-country governments (national & local) Evidence of institutional capacity of Fund and partners to influence and inform programming 	 Document review Key informant interviews Survey Focus group (Canada)

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
		2.1.2 Given progress to date, do the ultimate outcomes seem appropriate and feasible?		 Added by evaluation team Appropriateness and clarity of project program theories / logic models Evidence of progress toward intermediate outcomes 	Document reviewKey informant interviewsSurvey
		2.1.3 Are there unintended results, either positive or negative?		This will be based on material collected for questions spanning the range of the evaluation.	Document reviewKey informant interviewsFocus groupSurvey
	2.2 Efficiency	2.2.1 Has the implementation of Phase 2 been efficient and economical, relative to its purpose and intended outcomes?	2.2.1.1Are IDRC and Global Affairs resources (e.g. staff) being used efficiently to manage the projects and program?	 Added by evaluation team Cost of managing the fund as compared with funds disbursed, in line with commonly accepted parameters 	 Document review Key informant interviews (especially high-level IDRC & GAC staff & high-level decision makers)
			2.2.1.2 Was the call for proposal process efficient to reach targeted audiences (including private sector organizations)?	 Added by evaluation team Evidence of reach (e.g. in terms of number and proportion of applicants and/or grantees of all categories of stakeholders) Evidence of number & type of organization that submitted concept notes, in relation to goals Timeliness of calls for proposals Perceived fairness of process Inefficiencies in call for proposal process 	Document review Key informant interviews

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
			2.2.1.3 Are outputs being achieved on time and on budget?	Added by evaluation teamTimelinessOn budget	Document reviewKey informant interviewsSurvey
			2.2.1.4 What have been the strengths and weaknesses of the program's management and governance arrangements?	 Added by evaluation team: On Management Evidence of good practice (clear theory of change strategy, adequate plans and systems, etc.) Availability of reliable data through the existing M&E system Coherence and alignment of project and program level monitoring Extent and quality of relationship between IDRC and GAC (e.g. on joint monitoring) Added by evaluation team: On Governance Appropriateness of roles and responsibilities of Governance Appropriateness of roles and responsibilities of Scientific Advisory Committee Extent and perceived quality of relationship between IDRC and GAC Role of IDRC in preparation of proposal/project preparation and project approval 	Document review Key informant interviews

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
	2.3 Relevance	2.3.1 To what extent are CIFSRF Phase 2 expected results relevant:	2.3.1.1 To the food security needs of the poor (particularly small scale farmers and women) in developing countries?	 Added by evaluation team Degree of involvement of the poor in project formulation / design / implementation Evidence that results are responding to an expression of need and demand Evidence of projects based on sound analysis of food security needs of the poor Evidence of results being utilized by the poor (particularly women) / Evidence of applications of new solutions (particularly by women) Evidence of food security benefits for the poor Evidence of results used by institutional actors in attempts meet food security needs of the poor Evidence of project outputs on trajectory to contributing to national food security goals 	 Document review Key informant interviews Focus groups Survey
			2.3.1.2 To Canadian international development policy?	 Added by evaluation team Evidence of results used by Canadian actors Evidence of results which have influenced, Canadian actors Expected results consistent with Canadian development policies Expected results a high priority to GAC and its country programs GAC representative involvement in design and governance of the fund 	 Document review Key informant interviews Survey Focus group (Canada)

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
			2.3.1.3To Canadian international programs?	 Added by evaluation team Evidence of number & type of results used by Canadian actors Evidence of number & type of results which have influenced, Canadian actors Results consistent with Canadian development policies Results a high priority to GAC and its country programs GAC representative involvement in design and governance of the fund 	 Document review Key informant interviews Survey Focus group (Canada)
		2.3.1.4To private sector priorities?	 Added by evaluation team Interest expressed by private sector actors in program outputs Involvement of private sector actors in selecting projects Evidence of results used by private firms (producers, processors, market agents etc.) 	 Document review Key informant interviews Survey Focus group (Canada) 	
			2.3.1.5 In terms of food security research overall?	 Added by evaluation team Niche of CIFSRF in agriculture and food security funding Value-added of CIFSRF 	 Document review Key informant interviews Survey Focus group (Canada)
	2.4 Sustainability	2.4.1 What strategies for scaling up research results seem to be most promising for sustainable improvements to food security and nutrition?	2.4.1.1 Is CIFSRF's approach favouring the selection of scalable innovations?	 Added by evaluation team Evidence of scaling-up strategies Progress with scaling up to date in projects supported by the fund Diversification of financing for scaling up 	Document reviewKey informant interviewsFocus groupsSurvey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
				 Perceptions of stakeholders Implications of variability in call for proposal Implications of Phase 1 funding from CIFSRF as compared with those funded only in Phase 2 	
		2.4.2 How have results of the research been integrated into Global Affairs programming?		 Added by evaluation team Evidence of integration Evidence of financial support Evidence of planning around CIFSRF results 	Document reviewKey informant interviews
	2.5 Cross- Cutting Issues: Gender Equality	2.5.1 What are the strengths and weaknesses of the design and implementation of the Fund's gender equality strategy?		 Added by evaluation team Existence of a gender strategy Evidence of extent to which gender has been strategically integrated into all stages of CIFSRF programming Strategies through which gender has been strategically integrated into all stages of CIFSRF programming Availability of resources for the pursuit and implementation of the gender strategy Outcomes of CIFSRF activities on women specifically 	 Document review Key informant interviews Focus groups Survey
		2.5.2 Is CISFRF Phase 2 contributing to improving women's decision-making, access to and control of resources? How so?		 Added by evaluation team Perception of beneficiaries, women in particular but also men Evidence of women's economic development and empowerment stemming from CIFSRF projects 	Document reviewKey informant interviewsFocus groupsSurvey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
	2.6 Cross- Cutting Issues: Environmental Sustainability	2.6.1 What are the strengths and weaknesses of the design and implementation of the Fund's environmental strategy?		 Existence of an environmental strategy Examination of components of the Fund's environmental strategy (e.g. Strategic Environmental Assessment) Evidence of extent to which environmental sustainability has been integrated into all levels of CIFSRF programming Strategies through which environmental sustainability has been integrated into all levels of CIFSRF programming Availability of resources for the pursuit and implementation of the environmental strategy Outcomes of CIFSRF activities on the environment 	 Document review Key informant interviews Focus groups Survey
	6 S	2.6.2 How environmentally sustainable are the emerging results from CIFSRF Phase 2?		 Added by evaluation team Review of expected outputs based on environmental criteria Perceptions of Pls Perceptions of beneficiaries Perception of other key stakeholders 	Document reviewKey informant interviewsFocus groupsSurvey
	2.7 Cross- Cutting Issues: Governance (added in Phase 2)	2.7.1 What are the strengths and weaknesses of the Fund's ability to contribute to opportunities to promote principles of	2.7.1.1 Such as participation and inclusion?	 Added by evaluation team Existence of a governance strategy Examination of components of the Fund's governance strategy Evidence of extent to which governance principles have been integrated into all levels of CIFSRF 	Document reviewKey informant interviewsFocus groupsSurvey

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
		good governance?	2.7.1.2 Such as transparency and accountability?	 Strategies through which governance have been integrated into all levels of CIFSRF programming Availability of resources for the pursuit and implementation of the governance strategy Outcomes of CIFSRF activities on governance in terms of: Evidence and quality of participation Evidence and quality of inclusion Added by evaluation team Outcomes of CIFSRF activities on 	
			2.7.2.3 Such as equity and non-discrimination?	governance in terms of: - Evidence and quality of transparency - Evidence and quality of accountability Added by evaluation team • Outcomes of CIFSRF activities on governance in terms of: - Evidence and quality of equity - Evidence and quality of non-discrimination	

OBJECTIVE	AREA	QUESTION	SUB-QUESTION	INDICATOR ²	METHOD (DATA SOURCE)
		2.7.2 Is the CIFSRF Phase 2 promoting the adoption of bottom-up approaches to research and development that build and strengthen the core capabilities of poor and marginalized groups to participate in decision-making processes, and develop local solutions?		 Added by evaluation team Extent & nature of involvement of poor and marginalized groups in: Project planning Project implementation Review of project results Adaptation of project outputs Innovation that informs project modification 	 Document review Key informant interviews Focus groups Survey

Annex XLII. Stakeholders Consulted

STAKEHOLDER NAME	POSITION	AFFILIATION
GAC STAKEHOLDERS		
ANGELL, David	Canadian High Commissioner	Canadian High Commission, Nairobi, Kenya
CHATTERJEE, Lilian	DG Partnerships for Development Innovations	GAC, Governance Committee
CHOMYSHYN, Robyn	Senior Governance and Human Rights Specialist, Partnerships for Development Innovation Branch	Government of Canada
CSABA, Kati	Minister-Counsellor and Senior Director (Development)	GAC and Canadian Embassy
ERIKSEN-HAMEL, Nikita	Deputy Director for Food Security, Knowledge and Program Support	GAC
GAILOR, Ben	Trade Commissioner, Industry Liaison (Aquaculture)	GAC
GILBRETH, Chris	Senior Development Officer	Canadian Embassy, La Paz, Bolivia
GOLDBERG, Elissa	Assistant Deputy Minister	GAC, Governance Committee
HARPER, Diane	Director, Partnerships for Development Innovations	GAC, Scientific Advisory Committee
LAM, Sophie	Senior Gender Equality Specialist	GAC
LEAROYD, Susan	Pan Africa Program	Canadian High Commission, Nairobi, Kenya
LECLERC, Caroline	Director General, Food Security and Environment	GAC, Governance Committee
LUKAWIECKI-VYDELINGUM, Anona	Trade Commissioner	GAC
MALIKAIL, Patricia	Director General, West & Central Africa Bureau	GAC, Governance Committee
MEN, Bunleng	Trade Commissioner	Office of the Canadian Trade Commissioner Service in Cambodia
NIELSEN, Eric	Senior Innovation Advisor	GAC
PHANEUF, Heather	Senior Communications Officer, Outreach and Public Engagement	GAC
PROVENCHER, Marie France	First Secretary	Canadian High Commission, Nairobi, Kenya

STAKEHOLDER NAME	POSITION	AFFILIATION
RAVANELLI, Andrea	Environment Specialist	GAC
SCHNEIDER, Frank	Deputy Director, Knowledge Food Security Partnerships	GAC, Scientific Advisory Committee
WOSK, Irena	Senior International Development Officer	GAC
IDRC STAKEHOLDERS		
AHMED, Sara	Former Senior Program Specialist, IDRC	IDRC ARO
BUTARE, Innocent	Senior Program Specialist	IDRC
CARTER, Simon	Regional Director, Africa	IDRC
CHARRON, Dominique	Acting Director, Agriculture and Environment	IDRC, Governance Committee
CHATTERJEE, Anindya	Regional Director, Asia Regional Office	IDRC
DEPLAEN, Renaud	Program Leader, prev. PO for Caricom Nutrition & Health Proj.	IDRC
FAMINOW, Merle	Program Manager	IDRC, Scientific Advisory Committee
GLAUSEN, Fabienne	Analyst, Policy and Strategy	IDRC and Former GAC CIFSRF Program Officer
LAROUSSE, Delphine	Program Officer	IDRC
LEBEL, Jean	President of IDRC	IDRC
MANCHUR, Wendy	Program Officer (Jan. 2016 - present) Program Management Officer (2009 - January 2016)	IDRC
MBAO, Victor	Program Specialist	IDRC
MC GURK, Stephen	Vice-President, Programs; Co-Chair of CIFSRF Governance Committee	IDRC, Governance Committee
MULONGO, Musa	Program Officer, affiliated with IDRC's vaccines project with Gates Foundation	IDRC
NJUKI, Jemimah	Senior Program Specialist	IDRC
PAZ, Alvaro	Senior Program Officer	IDRC
RAIJ, Helen	Program Management Officer	IDRC, LACRO
RONDON, Marco	Senior Program Specialist	IDRC
SCHWARTZ, David	Director, Donor Partnership Division	IDRC, Governance Committee
TAYLOR, Suzanne	Senior Partnership Officer, Donor Partnerships	IDRC
THIESSEN, Kevin	Senior Program Specialist, Asia Regional Office	IDRC

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WESLEY, Annie	Senior Program Specialist / Lead PO and Collaborating PO on all projects	IDRC
EXTERNAL STAKEHOLDERS		
MOONEY, Pat	Executive Director	ETC Group
SANGINGA, Pascal	Senior Investment Support Officer, Former IDRC Senior Program Specialist	IFAD Investment Center
MACGILLIVARY, Iain	Special Advisor to the President	IFAD, former CIDA High Official
VENDELAC, Louise	Professor, Member of "The International Team on Nanosafety"	Institut des sciences de l'environnement et au département de sociologie, UQAM
LONG, Jennifer (Vern)	Senior International Agriculture Research Advisor, Bureau for Food Security	USAID
BERTRAM, Rob	Chief Scientist, Bureau for Food Security	USAID
WALSH, Susan	Executive Director	USC Canada
SCHEMMER, Darren	GAC (until 2013), VP Partnerships while on GC	Governance Committee
SINGH, Naresh	Formerly of GAC	Governance Committee
SAMSON, Paul	DG Multilateral Branch	Ministry of Finance, Governance Committee
HEPWORTH, Lorne	Retired President and CEO of CropLife Canada	Governance Committee, Scientific Advisory Committee
NDIKUMANA, Jean	Retired, Association for Strengthening Ag. Research in Eastern and Central Africa	Scientific Advisory Committee
MCLEAN, Diana	Consultant, The Cornucopia Group Inc	Scientific Advisory Committee
SCOTT, Bruce	Deputy Directors	Columbia Global Centers/Africa, Scientific Advisory Committee
THOMSON, Jennifer	Emerius Professor, Dept. of Molecular and Cell Biology	University of Cape Town, South Africa, Scientific Advisory Committee
BOLIVIA PROJECTS		
CAROLSFELD, Joachim	Principal Investigator	World Fisheries Trust
RAINVILLE, Tiffanie	Technical Investigator	World Fisheries Trust
DAVY, Brian	Consultant	World Fisheries Trust
FLAHERTY, Mark	Professor of Geography	University of Victoria, Canada
MACNAUGHTON, Alison	PhD Student at University of Victoria Associate for World Fisheries Trust	University of Victoria, World Fisheries Trust
BADANI, Luis E.	Principal Investigator	IMG, private consulting firm

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SALAS, Roxana	Technical Investigator	Faunagua, Bolivia
AVASTAFLOR, Widen	Director	CEPAC
CRESPO, Giovanni	Technical expert in aquaculture	CEPAC
HINOJOSA, Veronica	Technical staff	CEPAC
MENDOZA, Jose	Former President CEDIB	Centro de Investigación y Desarrollo Acuícola Bolivia (CEDIB)
ALEM, Julio	Bolivia Principal Investigator, Director of Special Project	Centro de Investigacion y Desarollo Regional (CIDRE)
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CURCUY, Navil	President	Cámara de acuicultores del Oriente (CAOR)
DAZA, Rodrigo	Coordinator	Amazon Fish For Food Project
SIANCAS, Juan	University Faculty Member	Yapacani, Bolivia
25 beneficiaries interviewed through 5 focus groups		
CAMBODIA PROJECTS		
GREEN, Tim	Professor	University of British Columbia
MICHAUX, Kristine	Project Manager, Fish on Farms	University of British Columbia
SUBRAMANIAN, Jayasankar	Canadian PI, Professor	University of Guelph
TALUKDAR, Zaman	Principle Investigator	Helen Keller International
PORTER, Keith	Country Director	Helen Keller International Cambodia
SIHUN, Sok	Project Officer - Fish on Farms	Helen Keller International
HOU, Kroeun	Deputy Director	Helen Keller Internaional Cambodia
HOING, Ly Sok	Program Manager	Helen Keller International Cambodia
CHAMROEUN, Chum	Project Manager	Organization to Develop Our Village (ODOV)
VISETH, Hav	Deputy Director General	Fisheries Administration, Ministry of Agriculture, Forests and Fisheries
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SOPHONNEARY, Prak	Deputy Director	National Maternal and Child Health Center, Cambodia
NUONG, Torn	Village Chief	Trapaing Pring Village
DAVY, Ung	General Manager	Leang Leng
KHUN, San	Hatchery Owner	Cambodia
THIDA, Phon	Village Model Farmer	Cambodia
CHHORN, Teuk	Village Model Farmer	Chambak Thma village, Sosen Commune, Cheung Prey District
KOEUN, Kun	Village Model Farmer	Trapaing Trom village, Sampon Chay Commune, Cheung Prey District
STOEUN, Eng	Village Health Volunteer	Fish on Farms Project, Chhke Kaun Village, Cambodia
22 beneficiaries interviewed through 4 focus groups		
ETHIOPIA PROJECTS		
HENRY, Carol	Principal Investigator	University of Saskachewan
BEYENE, Sheleme	Principal Investigator	Hawassa University
MAMO, Tekalign	Lead, two flagship national ag programs; ex State Minister for Ag; Advisor to PM and Ag	Ethiopian National government
FIKRE, Asnake	Crops Research Directorate Director; Senior Legume Breeder	Ethiopian Institute of Agricultural Research
GARUME, Germane	Deputy Head	Southern Nations, Nationalities and Peoples Regional Bureau of Agriculture
HAILU, Abinet	Maternal and child health and nutrition focal person	Regional Health Bureau, Southern Region
TEGEGNE, Azage	LIVES project manager, Deputy to Dir. Gen Rep in Ethiopia	International Livestock Research Institute (ILRI)
ASSEFA, Fikirte	Director of Hawassa Biodiversity Center	Ethiopian Biodiversity Institute
LEGESSE, Engidu	Co-Founder, President	Guts Agro Industry
AMEDE, Tilahun	Principal Scientist	ICRISAT – CGIAR
INDIA PROJECTS		
ORSAT, Valerie	Professor, Chair of Dept. of Bioresource Engineering	McGill University, Faculty of Agricultural and Environmental Sciences

STAKEHOLDER NAME	POSITION	AFFILIATION
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VASIMALAI, M.P.	Executive Director	DHAN Foundation
PALANISAMY, PL	Program Leader	DHAN Foundation
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SUBRAMANIAN, Kizhaeral S.	Head of Dept. of Nano Science & Technology	Tamil Nadu Agricultural University
RAO, Nageshwar	Project Coordinator, Small Millets	Indian Concil of Agricultural Research
KUMAR, Dinesha	Director	Earth360 Eco Ventures
YESUDAS, Salome	Consultant, Food Scientist and Specialist on Local Food Systems	DHAN Foundation
SAMPATH KUMAR, Toopran	Retired from DFATD	Formerly DFATD, Partnerships for Development Innovation
NAGARAJ, Arun	Secretary	Fruit Growers' Association of Tamil Nadu
SITARASU, V. G.	President	Tamil Nadu Mango Growers Association
Mr. MADHUVAN	Model Farmer	Krishnagiri, India
Mr. SHANDAKUMAR	Model Farmer	Krishnagiri, India
52 beneficiaries interviewed through 4 focus groups		
KENYA PROJECTS		
MCKAGUE, Kevin	Canadian PI, Assistant professor	Cape Breton University

STAKEHOLDER NAME	POSITION	AFFILIATION
POTTER, Andrew	Project Principal Investigator	U of Saskatchewan, Vaccine and Infectious Disease Organization (VIDO)
BERBEROV, Emil	Canadian Project Manager	U of Saskatchewan, Vaccine and Infectious Disease Organization (VIDO)
KAIRU WANYIOKE, Salome	Senior Deputy Director of Vet. Services / Member of the team conducting the Socio Economic Research	Ministry of Agriculture and Fisheries, Kenya
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SOI, Ruben	Kenyan Principal Investigator	Kenya Agricultural and Livestock Research Organization (KALRO)
WESONGA, Hezron	Kenyan Principal Investigator	Kenya Agricultural and Livestock Research Organization (KALRO)
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NAESSENS, Jan	Senior Scientist	ILRI
MWAZIKI, Naphtali	Masters Student	ILRI
ORWE, Moses	Student Trainee	ILRI - BECA/ Kenya Veterinary Vaccines Production Institute (KEVEVAPI)
JIWA, Farouk	Kenya Principal Investigator/ Co Founder	Farm Shop, Kenya
KAKAI, Noah	Chief Operating Officer	Farm Shop, Kenya
GACHIE, Paul	Agricultural Finance Officer	Farm Shop, Kenya
KIRAGURI, Paul	Franchisee Recruitment Coordinator	Farm Shop, Kenya
MWENDE, Casty	Livestock Advisor	Farm Shop, Kenya
OBASANJO, Patrick	Agronomist	Farm Shop, Kenya
WANDIA, Patricia PhD	Supplies Manager	Farm Shop, Kenya
MUNGUTI, Samuel	Marketing Manager	Farm Shop

STAKEHOLDER NAME	POSITION	AFFILIATION
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MUSAA, Joseph	Retired Director, Department of Veterinary Services, Kenya	Scientific Advisory Committee
14 beneficiaries interviewed through 2 focus groups		
ST. KITTS AND NEVIS PROJECT		
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PHILLIP, Leroy	Retired Professor	McGill University, Animal Nutrition
KETZIS, Jennifer	Professor and Researcher	Ross University School of Veterinary Medicine, St. Kitts
WATTS, Ilis	Consultant during St. Kitts project	Independent
GRANDERSON, Isabella	Principal Investigator and Lecturer, Human Nutrition & Dietetics, Faculty of Food and Agriculture	University of West Indies, Faculty of Food and Agriculture
LIBURD-WILLETT, Ionie	Permanent Secretary	Ministry of Education, St. Kitts
WILLIAMS, Leon	Manager, School Meals Centre	Ministry of Education, St. Kitts
GRUMBS, John	Principal, St. Paul's Primary School	Ministry of Education, St. Kitts
SKERRITT, Andrew	Permanent Secretary	Ministry of Health, St. Kitts
DUNCAN, Latoya	Nutrition Surveillance Coordinator	Ministry of Health, St. Kitts
STANLEY, Ashton	Former Permanent secretary, Agriculture	Ministry of Agriculture, St. Kitts
JAMES, Melvin	Head of section	Ministry of Agriculture, St. Kitts
WILLIAMS, St. Clair	Market Agent, Purchase Agent for school lunch kitchen during St. Kitts project	Independent
HENDERSON, Esmon	Farmer	Community-Level Beneficiary/Client

Annex XLIII. Terms of Reference (Scope)

Following recommendation from IDRC, the following paragraphs concerning the scope of the work have been highlighted from the Request for Proposal (RFP).

SECTION 1 – INTRODUCTION

The purpose of this section is to provide general information about the International Development Research Centre ("IDRC") and this RFP.

1.3 PURPOSE OF THIS RFP

IDRC requests proposals for the provision of an independent evaluation team to undertake a summative assessment of Phase 1 of the Canadian International Food Security Research Fund (CIFSRF) program and a formative assessment of Phase 2 of CIFSRF. Requirements are described in section 3, the Statement of Work ("Services").

SECTION 3 – STATEMENT OF WORK

This section is intended to provide Proponents with the information necessary to develop a competitive proposal. The Statement of Work is a complete description of the tasks to be done, results to be achieved, and/or the goods to be supplied.

3.1 RATIONALE, PURPOSE AND SPECIFIC OBJECTIVES OF THE EVALUATION

The Canadian International Food Security Research Fund (CIFSRF) is a 9-year, 2-phase, CAD\$124.5 million initiative implemented by Canada's International Development Research Centre (IDRC) and Global Affairs Canada (GAC). It aims to improve global food security and nutrition through applied, collaborative, results-oriented research that informs development practice.

A mid-term evaluation of the first phase, conducted in 2012, found that the program was well managed; that projects were relevant; that governance processes were well-defined and effective; and that there was clear evidence of progress in meeting CIFSRF objectives. This evaluation provided valuable insights on the development and implementation of the second phase of the CIFSRF (2013 – 2018).

Government of Canada requirements stipulate that an independent evaluation of the CIFSRF must occur every fifth program year. This current evaluation will be administered by IDRC, working in collaboration with GAC. The Terms of Reference have been developed jointly by GAC and IDRC. IDRC will be responsible for hiring, preparing and negotiating and management of the contract with the evaluation team.

The evaluation will be expected to provide insight on the results of the first phase (completed in March 2015), as well as providing early insights into the progress of Phase 2. The evaluation will examine the immediate outcomes of Phase 1 programming, and investigate to what extent Phase 2 programming is helping to bring about the intermediate outcomes that were envisaged. The evaluation will need to take into account that, while there is close continuity between the two phases, they are nevertheless distinct, responding to two different funding agreements between GAC and IDRC, and two different Performance Measurement Frameworks.

The evaluation team will be asked to explore a set of summative questions for Phase 1 (to respond to accountability requirements), and formative questions for Phase 2 to inform ongoing implementation. Together, these two sets of evaluation questions will represent an important source of information to guide future decisions regarding CIFSRF.

3.1.2 Specific Objectives of the Evaluation

The specific objectives of the evaluation are the following:

- 1) Determine the effectiveness, efficiency, relevance and sustainability of CIFSRF Phase 1
- 2) Determine the effectiveness, efficiency, relevance and sustainability of CIFSRF Phase 2 (to date)
- 3) Provide strategic findings, conclusions, recommendations and lessons for the future of the CIFSRF program

3.1.3 Beneficiaries, Uses and Users of the Evaluation

The main beneficiaries of the CIFSRF combined evaluation are the targeted developing countries who should be able to determine the relevance, usefulness and contributions of CIFSRF program results to their own national policies and food and nutrition strategies.

The primary intended users of the evaluation are the program's Governance Committee, management and staff. The evaluation will provide guidance to the CIFSRF's Governance Committee to determine the program's results and inform future food security policy and programming. IDRC and GAC management and program staff will also use the evaluation to inform the implementation of the remainder of Phase 2 and to communicate results from both phases, and potential future phases, to various stakeholders.

The results of the evaluation will be shared widely with developing country stakeholders connected with CIFSRF programming and themes. Stakeholders include national, regional, and local governments, civil society organizations, research institutes, and the most important end-beneficiaries — women small scale farmers.

The results of the evaluation will also be shared throughout GAC and with other donors and development practitioners who are interested to learn from CIFSRF's experience of knowledge translation into development practice and for the large-scale application and commercialization of agriculture and food security solutions.

3.2 BACKGROUND INFORMATION

3.2.1 Evaluation Object: Development Context

Food and nutritional insecurity presents a significant problem for most developing countries, particularly in sub-Saharan Africa and Asia, which account for almost 90% of the undernourished people in the world. The Food and Agriculture Organization of the United Nations estimated that as of 2015 close to 800 million people are undernourished.

Meanwhile, increasing food demand in middle-income countries is putting greater pressure on already stressed natural resources, and readily available land. Global gains in agricultural productivity have fallen to 1-2 percent per year, well short of the 3-5 percent growth rate needed to keep pace with the global demand for food, which by World Bank estimates is expected to double by 2050.

In all developing regions, especially the heterogeneous and risky rain-fed systems of Sub-Saharan Africa, there is a need for sustainable technologies to increase the productivity, stability, and resilience of production systems, to provide dietary needs for active and healthy lives, and to confront the growing challenges of climate change.

Evidence from the field shows that spending on agricultural research is one of the most effective types of investments for development. Agriculture-led growth addresses rural poverty directly and has spill-over effects beyond the sector that spur more general economic growth in developing countries. Increased investment in Canadian-led agricultural and nutrition-related research, in partnership with developing country organizations, has led to breakthrough solutions that directly benefit the poor and food insecure, and built stronger alliances and programming for agriculture and food security in the developing world.

The Canadian International Food Security Research Fund (CIFSRF, or the "Fund") was launched in 2009 as a joint initiative of IDRC and the former Canadian International Development Agency, now GAC, to support research that addresses food security in the developing world. The goal of the Fund is to foster the development of more equitable, productive and sustainable agricultural systems that increase food security and enhance nutrition. The Fund seeks to increase food security in developing countries by investing in applied research and promoting the scaling up of innovations and research results. At the same time, the Fund seeks to harness the best of Canadian expertise and knowledge to develop solutions that result in lasting impacts for the food insecure.

CIFSRF was developed to help to address one of Global Affairs' priority themes, food security, supporting the Research and Development pillar of GAC's Food Security Strategy. While the ultimate focus of the Fund is to increase environmentally sustainable food security for poor people – with a focus on women and women farmers – all projects were expected to generate results which can be used to sustainably improve economic growth and reduce income poverty.

The Fund also complemented IDRC's food security focus, which was a key theme in the Centre's 2010–2015 strategic framework, adding value to programming in this area by: i) greatly increasing the role of Canadian 'know-how' in research supported by IDRC; ii) permitting a greater emphasis on technologies suitable to improving agriculture and food security; and iii) enabling IDRC to support research in areas with the potential to improve food security at a large scale.

3.2.2 Description of the Research Program

The creation of the CIFSRF was announced on October 16, 2009 by the Honourable Beverley J. Oda, Canada's Minister of International Cooperation, and Lauchlan Munro, IDRC Vice-President, Corporate Strategy and Regional Management.

Key decisions about the Fund are made by a Governance Committee, made up of senior managers from GAC and IDRC. A Scientific Advisory Committee, composed of Canadian and international experts (and also co-chaired by Global Affairs and IDRC), is responsible for the scientific review of Concept Notes and proposals as well as making funding recommendations to the Governance Committee.

The CIFSRF was explicitly set up as a fund that would utilize competitive Calls to identify and select proposals based upon the merit of the idea. It was also explicitly set up to be broad-based, open to any potential research that could contribute to improved food security. The country eligibility for CIFSRF was considerably broader than the set of countries identified in the GAC countries of focus. These underlying principles of the Fund (open Calls, broad thematic eligibility, and wide country eligibility) were regularly reviewed and confirmed by the CIFSRF Governance Committee during the implementation of Phases 1 and 2.

CIFSRF Phase 1, budgeted at CA\$62 million, supported 21 large applied agriculture and nutrition research consortia in 20 countries, each involving a mix of Canadian and developing country researchers. The projects generated a portfolio of successful innovations (technologies, methodologies, and practices) with potential to greatly improve food security on a large scale in Asia, Africa and Latin America and the Caribbean. Solutions ranged from developing new livestock vaccines; low cost systems for precision application of fertilizers and water; high-nutrient and low-cost sustainable animal fodders; improve crop varieties and nutrient dense foods for women and infants; under-utilized vegetables for market development; nanotechnology to reduce post-harvest losses; improved fisheries, aquaculture and home-gardens at scale; more climate-resistant seed varieties; low-cost machinery to reduce women's drudgery; and late-blight resistant and more nutritious potatoes. CIFSRF Phase 1 was completed in March, 2015.

To build on the success of the Fund, on October 29, 2011, Prime Minister Stephen Harper announced continued support for CIFSRF, aimed at 'providing people in developing countries with a more secure supply of food with a greater nutritional value', with a focus on innovation and scaling up of research results. Phase 2 of the Fund, budgeted at CA\$62.5 million, was launched in April 2013, looking to harness the best of the private, public and not-for-profit sectors to expand CIFSRF's research portfolio and to scale up research results and innovations to reach more people and have a greater impact globally to improve food security. Phase 2 has funded 18 projects in 17 countries. Through the competitive process only the most promising innovations with potential for impact at scale developed in Phase 1, plus new innovations to be taken to scale, were selected. Eight projects build on previous research funded by CIFSRF Phase 1 and will expand their innovations at a large scale. Together the 18 projects are scaling up over 60 highly effective food security innovations that will contribute to increase productivity and agricultural production; improve nutrition; improve access to resources, and/or markets and income; and inform policy. These key innovations have commercial potential (especially for small and medium-sized enterprises), have potential at scale, and are consistent with current thinking on "game-changers" and "New Aid".

To date, the combined two phases, with a total budget of CAD\$124.5 million, have conducted six Calls for Proposals, selected 39 projects for funding in 24 countries with 20 Canadian organizations and 40 southern organizations.

More information on the Fund and the projects supported to date are available at: www.idrc.ca/cifsrf.

3.2.3 Intended Outcomes

CIFSRF's original goal was to "build on Canadian expertise and generate Canadian driven solutions in partnership with developing country organizations, and at scale that is meaningful for development. CIFSRF was designed to increase the contribution of Canadian and developing country research expertise toward solving global problems of food and nutritional insecurity through applied, collaborative, results-oriented research" (from CIFSRF Phase 1 Funding Agreement).

The Fund was created to increase knowledge of new and effective applications that improve sustainable agricultural productivity and the nutritional value of crops and livestock in developing countries, and provide an increased capacity for developing country organizations to implement and support effective, cutting-edge solutions for agricultural productivity and nutrition.

IDRC and GAC (in consultation with members of the Governance Committee and the Scientific Advisory Committee) jointly developed a Performance Management Strategy and a Risk Management Strategy for the first phase of the CIFSRF. These two strategies have been regularly updated and refined, and were further adapted for use in Phase 2.

Successful achievement of the program objectives will contribute to the following desired outcomes (from the CIFSRF Phase 2 logic model):

- <u>Ultimate Outcome</u> (long-term): Increased environmentally sustainable food security for the most food insecure: including women, girls, women subsistence farmers, men, and boys in targeted developing countries and regions.
- Intermediate Outcomes (medium-term):
 - Increased use of Canadian knowledge and resources by developing country researchers to address key food security research priorities in developing countries and globally with emphasis on environmental sustainability and equitable participation and benefit of women as farmers, consumers, and entrepreneurs alongside men

- Increased application and scaling up of environmentally sustainable food security and nutrition solutions that benefit subsistence farmers (particularly women), and promote the equitable participation of women and men in decision-making in developing countries
- More informed, gender responsive, environmentally sustainable, and better developed public policies and programming related to food security and nutrition in developing countries.
- mmediate Outcomes (short-term):
 - Improved capacity of Canadian-developing country partnerships to generate, disseminate, and scale up gender-sensitive applied research in sustainable food security (agricultural productivity and nutrition)
 - Increased global, national, and local knowledge of new, environmentally sustainable, gender sensitive research applications and scaling up models that increase agricultural productivity and the nutritional value of food in developing countries
 - Improved ability of developing country public and private sector organizations (involved in the
 research) to implement and support environmentally sustainable, gender-sensitive food
 security solutions with emphasis on enhanced participation and decision-making roles of
 women and women subsistence farmers alongside men
 - Improved awareness and understanding among Canadian and developing country policy makers, private sector, the development assistance community, and the public in Canada and developing countries of potential application-ready, environmentally sustainable, and gendersensitive solutions to food security issues in developing countries.

The CIFSRF Phase 1 and Phase 2 Performance Measurement Frameworks, including logic models, will be among some of the documents provided to the evaluators.

3.3 EVALUATION SCOPE

While the scope of the evaluation covers the entire research program described in section 3.2, the evaluation will examine the immediate outcomes of Phase 1 programming, and investigate to what extent Phase 2 programming is helping to bring about the intermediate outcomes that were envisaged.

The evaluation will be composed of three parts. A summative assessment of Phase 1, a formative assessment of Phase 2, and an integrated synthesis of the two, resulting in strategic recommendations for the design and implementation of possible future phases.

The evaluation will also need to take into account that, while there is close continuity between the two phases, they are nevertheless distinct, responding to two different funding agreements between GAC and IDRC (with specific roles and responsibilities allocated to project governance and management), and two Performance Measurement Frameworks.

As such, the evaluation team will be asked to explore a set of summative questions for Phase 1 (to respond to accountability requirements), and formative questions for Phase 2 to inform ongoing implementation. Together, these two sets of evaluation questions will represent an important source of information to guide future decisions regarding CIFSRF.

3.4 EVALUATION QUESTIONS

The evaluation will include a set of overarching questions that will address the whole program, and a set of questions tailored to the first and second phase respectively. The overarching questions address key strategic and programmatic lines of inquiry, such as relevance, efficiency, effectiveness, contribution towards furthering of GAC cross-cutting themes, value for money, and sustainability.

The CIFSRF Program objectives and outcomes have been refined and edited during program implementation and transition from CIFSRF Phases 1 to 2. Given the systematic design of CIFSRF Phases 1 and 2 – to move progressively forward along the research for development continuum – two sets of high level questions may be envisioned to guide the review process.

3.4.1 SUMMATIVE EVALUATION OF PHASE 1

As per the Phase 1 Funding Agreement, the summative final evaluation of the CIFSRF Phase 1 will focus on assessing the objectives of the Funding Agreement with IDRC, the relevance and performance of the fund, including identifying results achieved, and overall value for money.

The Evaluation Matrix provided within the Phase 1 Performance Measurement Strategy (PMS) lists a set of potential evaluation questions and issues that could be addressed within the summative final evaluation. Based on the immediate outcomes of CIFSRF Phase 1 and the detailed questions in the PMS, high-level evaluation questions to guide the Phase 1 Final Summative Evaluation component could include:

3.4.1.1 Effectiveness

- a) To what extent has the CIFSRF Phase 1 achieved the expected immediate outcomes and made progress towards the ultimate outcome as per the Logic Model, i.e.:
 - i. Has CIFSRF Phase 1 effectively harnessed Canadian expertise and improved capacity of Canadian-developing country partnerships to conduct applied research on food security issues (agricultural productivity and nutrition) and disseminate research results in the developing world?
 - ii. Has CIFSRF Phase 1 effectively generated new knowledge of environmentally sustainable food security and nutrition solutions that benefit subsistence farmers (particularly women)?
 - iii. Has CIFSRF Phase 1 effectively improved the ability of developing country organizations involved in the research to implement and support environmentally sustainable food security solutions, with a focus on women and women farmers?
 - iv. Has CIFSRF Phase 1 effectively improved awareness and understanding among policy makers, the development assistance community and the general public in Canada and developing countries of potential application-ready solutions to food security issues in developing countries?
- b) Where there significant unintended results, either positive or negative?

3.4.1.2 Efficiency

- a) Was the implementation of the CIFSRF efficient and economical, relative to its purpose and intended outcomes?
- b) Were IDRC and GAC resources (e.g. staff) used efficiently to manage the projects and program?
- c) Was the Call for Proposal process efficient to reach targeted audiences?
- d) What have been the strengths and weaknesses of the program's management and governance arrangements?

3.4.1.3 Relevance

- a) To what extent are CIFSRF Phase 1 results relevant to the food security needs of the poor (particularly small scale farmers and women) in developing countries? To Canadian international development policy and programs? To private sector priorities?
- b) How did CIFSRF Phase 1 contribute to general thinking and debates on Food Security (Innovation in agriculture)?

3.4.1.4 Sustainability

- a) What is the likelihood that results/benefits will continue now that Phase 1 is finished? To what extent does Phase 2 provide an adequate and appropriate intervention to help ensure sustainability of Phase 1 results?
- b) Besides CIFSRF Phase 2, are there other committed financial and human resources to maintain benefits and results of Phase 1?
- c) How have results of the research been integrated into GAC programming?

3.4.1.5 Cross-cutting Issues

- a) Gender Equality:
 - i. What were the strengths and weaknesses of the design and implementation of the Fund's gender equality strategy?
 - ii. Has CISFRF Phase 1 contributed to improving women's decision-making, access to and control of resources?
- b) Environmental Sustainability:
 - i. What were the strengths and weaknesses of the design and implementation of the Fund's environmental strategy?
 - ii. What were the positive and negative results of CIFSRF Phase 1 in terms of environmental sustainability?

3.4.1.6 Conclusions

a) Having answered these questions, the evaluation team should provide conclusions relevant to the overall purposes of the evaluation.

3.4.2 FORMATIVE EVALUATION OF PHASE 2

The criteria to be used for the mid-term evaluation of CIFSRF Phase 2 are not specified in the Phase 2 Funding Agreement. Questions used in the evaluation matrix of the Phase 1 Performance Measurement Strategy (to be shared with the evaluators at start of contract) could potentially be used for Phase 2, as below (and with minor adjustments). Based on the Intermediate outcomes of CIFSRF Phase 2 and the detailed questions in the CIFSRF PMS, high-level evaluation questions to guide the Phase 2 Mid-Term Formative Evaluation component could include:

3.4.2.1 Effectiveness

- a) Is the CIFSRF Phase 2 on track to meeting the expected immediate and intermediate outcomes as per the Logic Model?
 - i. Is CIFSRF Phase 2 on track to effectively increase the use of Canadian expertise and knowledge in food security related science and technology in order to strengthen Canada's contribution of solutions that increase food security in a lasting and significant manner?
 - ii. Is CIFSRF Phase 2 on track to consolidate and scale up the best innovations and technologies from Phase 1, as well as identifying new ones with potential, and effectively scaling up their use into development outcomes with a portfolio of projects that tests and will ultimately document good practices for scaling up research innovations into use?
 - iii. Is CIFSRF Phase 2 effectively on track to use the results of research to develop more informed and better public policies and programming related to food security and nutrition in developing countries?
- b) Given progress to date, do the ultimate outcomes seem appropriate and feasible?
- c) Are there unintended results, either positive or negative?

3.4.2.2 Efficiency

- a) Has the implementation of Phase 2 been efficient and economical, relative to its purpose and intended outcomes?
- b) Are IDRC and GAC resources (e.g. staff) being used efficiently to manage the projects and program?
- c) Was the Call for Proposal process efficient to reach targeted audiences (including private sector organizations)?
- d) Are outputs being achieved on time and on budget?
- e) What have been the strengths and weaknesses of the program's management and governance arrangements?

3.4.2.3 Relevance

a) To what extent are CIFSRF Phase 2 results relevant to the food security needs of the poor (particularly small scale farmers and women) in developing countries? To Canadian international development policy and programs? To private sector priorities?

3.4.2.4 Sustainability

- a) What strategies for scaling up research results seem to be most promising for sustainable improvements to food security and nutrition?
- b) How can results of the research be integrated into GAC programming?

3.4.2.5 Cross-Cutting Issues

- a) Gender Equality:
 - i. What are the strengths and weaknesses of the design and implementation of the Fund's gender equality strategy?
 - ii. Is CISFRF Phase 2 contributing to improving women's decision-making, access to and control of resources? How so?
- b) Environmental Sustainability:
 - i. What are the strengths and weaknesses of the design and implementation of the Fund's environmental strategy?
 - ii. How environmentally sustainable are the emerging results from CIFSRF Phase 2?
- c) Governance (added in Phase 2):
 - i. What are the strengths and weaknesses of the Fund's ability to contribute to opportunities to promote principles of good governance, such as participation and inclusion, transparency and accountability, equity and non-discrimination?
 - ii. Is the CIFSRF Phase 2 promoting the adoption of bottom-up approaches to research and development that build and strengthen the core capabilities of poor and marginalized groups to participate in decision-making processes, and develop local solutions?

3.4.2.6 Conclusions and Recommendations

Having answered these questions, please provide conclusions and recommendations relevant to the overall purpose of the evaluation. What are the most important adjustments the program could make as it continues to implement Phase 2? What are the key strategic issues to consider to ensure that future programming will increase the likelihood of achieving significant and lasting outcomes that promote social and gender equity and are environmentally sustainable?

3.4.3 INTEGRATION OF EVALUATION CONCLUSIONS AND STRATEGIC RECOMMENDATIONS

3.4.3.1 Integration of Evaluation Conclusions

This evaluation will also be used to inform the development of potential future phases of CIFSRF focused on the up-take of research into development programming and private sector investment. The evaluators should consider questions with this in mind that could include:

a) What patterns of strengths and weaknesses emerge from the assessments of Phases 1 and 2, in terms of the evaluation criteria?

3.4.3.2 Strategic Recommendations for Future Programming

- a) What are the implications of the strengths, weaknesses, and results of the CIFSRF so far, for the design and implementation of potential future phases?
- b) What else should the Fund consider to increase the uptake of research results, bringing results to scale, including increasing private sector involvement, for potential future phases?
- c) Do the evaluation results suggest important changes in direction to ensure future programming results in improved social and gender equity and environmental sustainability?
- d) Is there a continued need for and relevance of the CIFSRF program to GAC and the Government of Canada international assistance priorities?

Annex XLIV. Interview Guide

CIFSRF: Interview Guide

Introduction

(Leave recording device off)

In February 2016, Universalia was contracted to undertake an evaluation of the Canadian International Food Security Research Fund (CIFSRF). You have been identified as a key respondent, and we thank you for your participation in this interview.

The interview is confidential. While you will be named as a key informant of the study overall, in our list of consulted stakeholders, your specific contribution to the study will be anonymous. We will not associate your name with anything specifically included in this report.

Please confirm that I may record this interview.

(Turn the recorder on, once confirmed)

It is (today's date). I am interviewing (state the person's name), who has confirmed that I may record this confidential interview for research and evaluation purposes associated with the evaluation of CIFSRF. Correct? (a prompt for the person to agree again).

Note to Interviewer

There are approximately 40 questions outlined below, while 13-15 can typically be asked in a semistructured interview. These questions have been designed to cover the range of issues to be addressed by the evaluation of CIFSRF. Thus, the interviewer will need to select the pertinent ones to ask respondents, depending on who they are, how early in the process the interview takes place, the type and level of experience that is expected, how much time is allotted to the interview.

In order to accommodate for the dynamics and flow of interviews, in some cases, the questions jump between relevance, effectiveness and sustainability. While the logic of evaluation is such that these remain together and distinct, the flow of interviewing is such that thematic discussions are often best pursued coherently. Interviewers will need to accommodate for this when reporting on interviews.

These questions will also be modified slightly by the interviewer, to accommodate for the language skills of interviewees (i.e. actual language used, familiarity with jargon, etc.). While this interview guide can be used verbatim, it is preferable that it be used to guide an experienced interviewer through a more conversational exchange. This interview guide is situated with the tradition and method of semi-structured interviewing.

Abridged questions

Phase	Issues	Interview questions	Stakeholders to interview
Warm-Up	Situating Interviewee	Why do you think you have been asked to participate in this evaluation of CIFSRF?	All
Niche	CIFSRF Overall	Why was CIFSRF created? What do you understand CIFSRF's niche to be, among Research for Development (R4D) funds?	All
Context	Project background	Please tell me about the background of this project: Where did the idea originally come from? Was this a new project when you obtained CIFSRF support, were you (or others) working on this topic before? What has changed with CIFSRF support?	IDRC Staff (HQ) IDRC Staff (ROs) GAC GC SAC Canadian PIs Developing Country PIs
Effectiveness	Partnership: Program	Program: How has the CIFSRF program-level partnership between IDRC and DFATD/GAC evolved over time?	IDRC Staff (HQ) IDRC Staff (ROs) GAC GC SAC
	Partnership: Project	Project: How have CIFSRF project partnerships evolved over time, from the time of their initiation onwards to the present time?	IDRC Staff (HQ) IDRC Staff (ROs) GAC GC SAC Canadian PIs Developing Country PIs Developing Country National Authorities Developing Country Sub-National Authorities Private Sector Community-Level Beneficiaries/Clients
	Canadian Expertise	What is the contribution and value-added of Canadians and Canadian expertise to the projects and/or programme? Is the program on track to increase the contribution of Canadians, Canadian expertise and knowledge?	All (selectively)

Phase	Issues	Interview questions	Stakeholders to interview
	Ability/ Capacity/ Capabilities	Is the ability of developing country organizations to undertake relevant research strengthened through CIFSRF?	All
	New Knowledge	Has the program been successful at generating new knowledge, innovations and technologies that (a) benefit the poor and (b) with potential for scaling up? To what extent? How?	All
Relevance	To food security needs of the poor	How are program results responding to the needs of the poor (particularly small scale farmers and women) in developing countries?	All (selectively)
	To Canadian development	Is there evidence that Canadian international development policy and programs are informed by program results?	All (selectively)
	To private sector	How are program results relevant to private sector priorities?	All (selectively)
Effectiveness	Awareness and Understanding	Has the program been successful at improving awareness and understanding of these food security solutions in developing countries among policy makers the development assistance community the general public in Canada and developing countries?	All (selectively)
	Policy and Programming	How has the program contributed to more informed and better public policies and programming related to food security and nutrition in developing countries?	All (selectively)
Relevance	Thinking and Debates	How has the program contributed to general thinking and debates on Food Security and agricultural innovation?	All
Effectiveness	Unintended Results	Were there significant unintended results, either positive or negative?	All
	Ultimate Outcomes	Given progress to date, do the ultimate outcomes seem appropriate and feasible?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls Key External Informants
	Consolidation and scaling up	Is Phase 2 consolidating and scaling up the best innovations from Phase 2? In Phase 2, have new high-potential innovations been identified & are they being scaled up?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls, Private Sector, Key External Informants

Phase	Issues	Interview questions	Stakeholders to interview
Sustainability	Continuation of Results (from Phase 1 to Phase 2)	Why did projects (not) continue into Phase 2? What were the relevant factors in making that happen?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls, Private Sector, Community-Level Beneficiaries/Clients, Key External Informants
		Why and how is your project an appropriate continuation to phase 1? What has been the contribution of Phase 2 to the continuity / sustainability of the research results in Phase 1?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls, Private Sector, Community-Level Beneficiaries/Clients, Key External Informants
Sustainability and Effectiveness	Scaling Up (project) (For Phase 1, scaling up is in Effectiveness; Phase 2, scaling up is in both effectiveness and sustainability)	How is your project strategizing and implementing 'scaling-up'?	All (selectively)
Sustainability and Effectiveness	Scaling Up (program) (For Phase 1, scaling up is in Effectiveness; Phase 2, scaling up is in both effectiveness and sustainability)	How is the program strategizing and supporting such 'scaling-up'?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls

Phase	Issues	Interview questions	Stakeholders to interview
Sustainability	Financial and Human Resources	Besides IDRC, are there other committed financial and human resources to maintain benefits and results of Phase 1?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls, Developing Country National Authorities, Developing Country Sub-National Authorities, Private Sector, Community- Level Beneficiaries/Clients
	Integration with GAC	How have results of the research been integrated into Global Affairs programming?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Embassies, Canadian Pls, Developing Country Pls
Gender	Strategy	What are the strengths and weaknesses of the design and implementation of the Fund's gender equality strategy?	All (selectively)
	Results/Power	How is the program contributing to improving women's decision-making, access to and control of resources (if indeed it is)?	All
Environment	Strategy	What were the strengths and weaknesses of the design and implementation of the Fund's environmental strategy?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls, Key External Informants
	Results	How environmentally sustainable have program results been throughout? Have there been any negative results?	All (selectively)
Governance	Contribution to opportunities	How is the fund promoting principles of good governance, and what have been the concrete implications of doing so?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls, Key External Informants
	Bottom-up research	Is the program promoting bottom-up approaches to research and development, empower poor and marginalized groups and developing local solutions?	All
Efficiency	Overall Efficient and Economical	Overall, are you able to assess the efficiency with which the program has been planned, delivered and monitored?	All (selectively)

Phase	Issues	Interview questions	Stakeholders to interview		
	Resources	Were/Are IDRC and Global Affairs resources (e.g. staff) used efficiently to manage the program and/or the projects?	All (selectively)		
	Call for Was the call for proposal process efficient to reach targeted audiences (including private sector organizations)?				
	Timely and On Budget	Have the outputs been achieved on time and on budget?	All (selectively)		
	Monitoring and Evaluation	Does CIFSRF provide sufficient/adequate support for the completion of expected M&E on projects? Are the guidelines/directions for project M&E sufficiently clear, user-friendly, comprehensive?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, Canadian Pls, Developing Country Pls		
	Strengths and Weaknesses: Management	What have been the strengths and weaknesses of the program's management arrangements?	All (selectively)		
	Strengths and Weaknesses: Governance	What have been the strengths and weaknesses of the program's governance arrangements?	IDRC Staff (HQ), IDRC Staff (ROs), GAC, GC, SAC, Canadian Pls, Developing Country Pls		
Concluding	Overall assessment	In conclusion, on a scale from 1 to 10 (10 being the highest satisfaction possible) how satisfied have you been with CIFSRF overall?	All		
	Recommen- dations	What are your top three recommendations for improving CIFSRF?	All		
Cool-down		Is there anything more that you would like to discuss further, or add, that we have not yet or adequately covered?	All		

Thank you for your participation in this interview.

Annex XLV. Survey Results

CIFSRF Phase 1 Results (Phase 1 combined with Phase 1 + Phase 2)

1. What is your gender identity?

Response	Chart	Percentage	Count
Female		25.5%	13
Male		74.5%	38
Transgender		0.0%	0
Other response		0.0%	0
		Total Responses	51

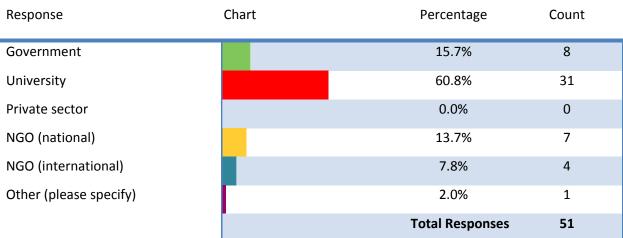
1. What is your gender identity? (Other response)

Response

2. For which Phase(s) of CIFSRF have you been Principal Investigator of (a) CIFSRF-supported project(s)?

Response	Chart	Percentage	Count
Phase 1		58.8%	30
Phase 2		0.0%	0
Phase 1 and Phase 2		41.2%	21
		Total Responses	51

3. To which of the following groups does your organization belong?



3. To which of the following groups does your organization belong? (Other (please specify))

Response 1. PARASTATAL

4. In which area of the world is / was your project located?

Response	Chart	Percentage	Count
Asia		33.3%	17
Latin America and the Caribbean		21.6%	11
Sub-Saharan Africa		45.1%	23
Middle East and North Africa		0.0%	0
		Total Responses	51

5. Based on your experience and knowledge of CIFSRF, for each statement below, please select the answer that best reflects your views:

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.1 CIFSRF occupies an important niche in the area of food security research for development.	0 (0.0%)	0 (0.0%)	13 (26.5%)	36 (73.5%)	0 (0.0%)	49
	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.2 Phase 1 – partnerships: CIFSRF has contributed to improving the capacity of Canadian and developing country partnerships.	0 (0.0%)	0 (0.0%)	12 (25.0%)	36 (75.0%)	0 (0.0%)	48
5.3 Phase 2 – partnerships: CIFSRF is contributing to improving the capacity of Canadian and developing country partnerships.	0 (0.0%)	0 (0.0%)	7 (15.6%)	20 (44.4%)	18 (40.0%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.4 Phase 1 – new knowledge: CIFSRF has generated new food security innovations.	0 (0.0%)	1 (2.1%)	14 (29.2%)	32 (66.7%)	1 (2.1%)	48
5.5 Phase 2 – scaling up innovations: CIFSRF is scaling up promising new food security innovations.	0 (0.0%)	0 (0.0%)	7 (15.6%)	18 (40.0%)	20 (44.4%)	45
5.6 Phase 1 – capabilities: The ability of developing country organizations to undertake relevant research has been strengthened through CIFSRF.	0 (0.0%)	1 (2.1%)	11 (22.9%)	36 (75.0%)	0 (0.0%)	48
5.7 Phase 2 – capabilities: The ability of developing country organizations to undertake relevant research is being strengthened through CIFSRF.	0 (0.0%)	1 (2.2%)	7 (15.6%)	19 (42.2%)	18 (40.0%)	45
5.8 (a) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: Policy- makers in developing countries.	0 (0.0%)	5 (10.4%)	16 (33.3%)	22 (45.8%)	5 (10.4%)	48
5.8 (b) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: The development assistance community.	0 (0.0%)	0 (0.0%)	24 (50.0%)	22 (45.8%)	2 (4.2%)	48

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.8 (c) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: The general public in Canada.	0 (0.0%)	6 (12.5%)	20 (41.7%)	8 (16.7%)	14 (29.2%)	48
5.8 (d) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: The general public in developing countries.	0 (0.0%)	5 (10.4%)	23 (47.9%)	18 (37.5%)	2 (4.2%)	48
5.9 (a) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: Policy- makers in developing countries.	0 (0.0%)	2 (4.4%)	9 (20.0%)	12 (26.7%)	22 (48.9%)	45
5.9 (b) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The development assistance community in Canada.	0 (0.0%)	0 (0.0%)	14 (31.1%)	3 (6.7%)	28 (62.2%)	45
5.9 (c) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The general public in Canada.	0 (0.0%)	4 (8.9%)	13 (28.9%)	1 (2.2%)	27 (60.0%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.9 (d) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The general public in developing countries.	0 (0.0%)	3 (6.7%)	12 (26.7%)	7 (15.6%)	23 (51.1%)	45
5.9 (e) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The private sector: Small-scale in developing countries.	0 (0.0%)	1 (2.2%)	14 (31.1%)	10 (22.2%)	20 (44.4%)	45
5.9 (f) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The private sector: National level in developing countries.	0 (0.0%)	0 (0.0%)	17 (37.8%)	7 (15.6%)	21 (46.7%)	45
5.9 (g) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The private sector: Multinational level.	0 (0.0%)	4 (8.9%)	9 (20.0%)	6 (13.3%)	26 (57.8%)	45
5.10 CIFSRF has contributed to better public policies related to food security and nutrition in developing countries.	0 (0.0%)	3 (6.2%)	18 (37.5%)	16 (33.3%)	11 (22.9%)	48

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.11 CIFSRF has contributed to better public programming related to food security and nutrition in developing countries.	0 (0.0%)	4 (8.3%)	23 (47.9%)	8 (16.7%)	13 (27.1%)	48
5.12 Phase 1 – Canadian contribution: CIFSRF has contributed to increased use of Canadian expertise in applied food security research.	0 (0.0%)	2 (4.2%)	15 (31.2%)	30 (62.5%)	1 (2.1%)	48
5.13 Phase 2 – Canadian contribution: CIFSRF is contributing to increased use of Canadian expertise in applied food security research.	0 (0.0%)	1 (2.2%)	9 (19.6%)	20 (43.5%)	16 (34.8%)	46
	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.14 (a) Results generated by CIFSRF-funded research have successfully responded to the needs of: Poor communities.	0 (0.0%)	1 (2.2%)	17 (37.8%)	24 (53.3%)	3 (6.7%)	45
5.14 (b) Results generated by CIFSRF-funded research have successfully responded to the needs of: Small-scale farmers.	0 (0.0%)	1 (2.2%)	16 (35.6%)	26 (57.8%)	2 (4.4%)	45
5.14 (c) Results generated by CIFSRF-funded research have successfully responded to the needs of: Small-scale women farmers in particular.	0 (0.0%)	1 (2.2%)	16 (35.6%)	22 (48.9%)	6 (13.3%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.14 (d) Results generated by CIFSRF-funded research have successfully responded to the needs of: Developing country governments.	0 (0.0%)	1 (2.2%)	23 (51.1%)	15 (33.3%)	6 (13.3%)	45
5.14 (e) Results generated by CIFSRF-funded research have successfully responded to the needs of: The Government of Canada.	0 (0.0%)	2 (4.4%)	14 (31.1%)	9 (20.0%)	20 (44.4%)	45
5.14 (f) Results generated by CIFSRF-funded research have successfully responded to the needs of: The private sector: Small-scale in developing countries.	1 (2.2%)	3 (6.7%)	21 (46.7%)	10 (22.2%)	10 (22.2%)	45
5.14 (g) Results generated by CIFSRF-funded research have successfully responded to the needs of: The private sector: National level in developing countries.	0 (0.0%)	3 (6.7%)	20 (44.4%)	9 (20.0%)	13 (28.9%)	45
5.14 (h) Results generated by CIFSRF-funded research have successfully responded to the needs of: The private sector: Multinational level.	0 (0.0%)	8 (17.8%)	12 (26.7%)	2 (4.4%)	23 (51.1%)	45
5.15 CIFSRF-supported research for development has contributed to debates on food security innovation.	0 (0.0%)	1 (2.2%)	22 (48.9%)	18 (40.0%)	4 (8.9%)	45
5.16 Phase 2: CIFSRF is effectively strategizing the scaling up of research results that have potential.	0 (0.0%)	2 (4.4%)	9 (20.0%)	19 (42.2%)	15 (33.3%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.17 Phase 2: Phase 2 projects are an appropriate continuation of Phase 1.	0 (0.0%)	0 (0.0%)	7 (15.6%)	24 (53.3%)	14 (31.1%)	45
5.18 Phase 2: CIFSRF is providing appropriate support for the scaling-up of research results that have potential.	0 (0.0%)	3 (6.7%)	4 (8.9%)	19 (42.2%)	19 (42.2%)	45
5.19 (a) In the case of your project, the results of research have been adopted by: Poor communities.	0 (0.0%)	5 (11.1%)	13 (28.9%)	17 (37.8%)	10 (22.2%)	45
5.19 (b) In the case of your project, the results of research have been adopted by: Small-scale farmers.	1 (2.2%)	3 (6.7%)	16 (35.6%)	18 (40.0%)	7 (15.6%)	45
5.19 (c) In the case of your project, the results of research have been adopted by: Small-scale women farmers in particular.	1 (2.2%)	3 (6.7%)	14 (31.1%)	19 (42.2%)	8 (17.8%)	45
5.19 (d) In the case of your project, the results of research have been adopted by: Developing country governments.	0 (0.0%)	4 (8.9%)	21 (46.7%)	11 (24.4%)	9 (20.0%)	45
5.19 (e) In the case of your project, the results of research have been adopted by: The Government of Canada.	3 (6.7%)	4 (8.9%)	10 (22.2%)	4 (8.9%)	24 (53.3%)	45
5.19 (f) In the case of your project, the results of research have been adopted by: The private sector: Small-scale in developing countries.	0 (0.0%)	6 (13.3%)	17 (37.8%)	12 (26.7%)	10 (22.2%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.19 (g) In the case of your project, the results of research have been adopted by: The private sector: National level in developing countries.	1 (2.2%)	6 (13.3%)	18 (40.0%)	6 (13.3%)	14 (31.1%)	45
5.19 (h) In the case of your project, the results of research have been adopted by: The private sector: Multinational level.	1 (2.2%)	11 (24.4%)	8 (17.8%)	2 (4.4%)	23 (51.1%)	45
5.20 In the case of your project, additional financial resources have been secured to maintain results of Phase 1.	2 (4.4%)	12 (26.7%)	18 (40.0%)	11 (24.4%)	2 (4.4%)	45
5.21 In the case of your project, additional human resources have been secured to maintain results of Phase 1.	2 (4.4%)	9 (20.0%)	19 (42.2%)	11 (24.4%)	4 (8.9%)	45

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project:

Variable Response

Phase 1 – Positive:	The 38 response(s) to this question can be found in the appendix.
Phase 1 – Negative:	The 28 response(s) to this question can be found in the appendix.
Phase 2 – Positive:	The 23 response(s) to this question can be found in the appendix.
Phase 2 – Negative:	The 20 response(s) to this question can be found in the appendix.

7. Based on your experience and knowledge of CIFSRF, for each statement below, please select the answer that best reflects your views:

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.1 CIFSRF has an appropriate gender strategy.	1 (2.3%)	3 (6.8%)	21 (47.7%)	16 (36.4%)	3 (6.8%)	44

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.2 CIFSRF-supported research for development has contributed to improving women's access to resources.	0 (0.0%)	2 (4.5%)	16 (36.4%)	19 (43.2%)	7 (15.9%)	44
7.3 CIFSRF-supported research for development has contributed to improving women's relative power in their communities.	0 (0.0%)	3 (6.8%)	17 (38.6%)	15 (34.1%)	9 (20.5%)	44
7.4 CIFSRF has an appropriate environmental sustainability strategy.	1 (2.3%)	1 (2.3%)	20 (45.5%)	19 (43.2%)	3 (6.8%)	44
7.5 Results generated by CIFSRF- supported research for development are environmentally sustainable.	0 (0.0%)	0 (0.0%)	17 (38.6%)	20 (45.5%)	7 (15.9%)	44
7.6 Phase 2 only - CIFSRF has an appropriate good governance strategy.	0 (0.0%)	2 (4.5%)	10 (22.7%)	9 (20.5%)	23 (52.3%)	44
7.7 (a) Phase 2 only - CIFSRF's good governance strategy is promoting: Greater transparency.	0 (0.0%)	0 (0.0%)	11 (25.0%)	9 (20.5%)	24 (54.5%)	44
7.7 (b) Phase 2 only - CIFSRF's good governance strategy is promoting: Greater accountability.	0 (0.0%)	0 (0.0%)	10 (22.7%)	9 (20.5%)	25 (56.8%)	44
7.7 (c) Phase 2 only - CIFSRF's good governance strategy is promoting: Appropriate inclusion.	0 (0.0%)	0 (0.0%)	12 (27.3%)	9 (20.5%)	23 (52.3%)	44
7.7 (d) Phase 2 only - CIFSRF's good governance strategy is promoting: Appropriate participation.	0 (0.0%)	0 (0.0%)	13 (29.5%)	8 (18.2%)	23 (52.3%)	44

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.7 (e) Phase 2 only - CIFSRF's good governance strategy is promoting: Bottom-up approaches to research and development.	0 (0.0%)	0 (0.0%)	11 (25.0%)	10 (22.7%)	23 (52.3%)	44
7.7 (f) Phase 2 only - CIFSRF's good governance strategy is promoting: Greater equity.	0 (0.0%)	1 (2.3%)	14 (31.8%)	8 (18.2%)	21 (47.7%)	44
7.7 (g) Phase 2 only - CIFSRF's good governance strategy is promoting: Decreased discrimination.	1 (2.3%)	1 (2.3%)	11 (25.0%)	7 (15.9%)	24 (54.5%)	44
	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.8 CIFSRF has been efficiently planned.	0 (0.0%)	3 (6.8%)	19 (43.2%)	21 (47.7%)	1 (2.3%)	44
7.9 CIFSRF has been efficiently delivered.	0 (0.0%)	1 (2.3%)	25 (56.8%)	17 (38.6%)	1 (2.3%)	44
7.10 CIFSRF's monitoring mechanisms are appropriate.	0 (0.0%)	2 (4.5%)	24 (54.5%)	16 (36.4%)	2 (4.5%)	44
7.11 (a) For the completion of expected monitoring and evaluation of projects, IDRC provides: Appropriate guidance.	0 (0.0%)	1 (2.3%)	19 (43.2%)	22 (50.0%)	2 (4.5%)	44
7.11 (b) For the completion of expected monitoring and evaluation of projects, IDRC provides: Appropriate technical support.	0 (0.0%)	2 (4.5%)	18 (40.9%)	21 (47.7%)	3 (6.8%)	44
7.11 (c) For the completion of expected monitoring and evaluation of projects, IDRC provides: Adequate time.	1 (2.3%)	6 (13.6%)	23 (52.3%)	12 (27.3%)	2 (4.5%)	44

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.12 For Phase 1, CIFSRF has provided good value for the funds expended.	1 (2.3%)	0 (0.0%)	14 (31.8%)	29 (65.9%)	0 (0.0%)	44

8. Please list three main strengths or positive aspects of CIFSRF.

Variable Response

Strength 1:	The 43 response(s) to this question can be found in the appendix.
Strength 2:	The 42 response(s) to this question can be found in the appendix.
Strength 3:	The 41 response(s) to this question can be found in the appendix.

9. Please list three main weaknesses or areas that could be improved of CIFSRF.

Variable Response

Weakness 1:	The 42 response(s) to this question can be found in the appendix.
Weakness 2:	The 33 response(s) to this question can be found in the appendix.
Weakness 3:	The 22 response(s) to this question can be found in the appendix.

10. Phase 1: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall?

The 43 response(s) to this question can be found in the appendix.

11. Phase 2: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall?

The 29 response(s) to this question can be found in the appendix.

12. Please list your top three suggestions or recommendations for improving CIFSRF?

Variable Response

Recommendation 1:	The 40 response(s) to this question can be found in the appendix.
Recommendation 2:	The 36 response(s) to this question can be found in the appendix.
Recommendation 3:	The 27 response(s) to this question can be found in the appendix.

13. Please share additional thoughts or comments about any aspect of CIFSRF.

The 27 response(s) to this question can be found in the appendix.

Appendix

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 1 - Positive:

- 1. Collaboration with a diverse group of people
- 2. Had an opportunity to know the lifestyle and cultural activities of the millet growing regions.
- 3. 1. Researchers of the project found that as a result of collecting the available local varieties an indigenous inger millet variety called "Kiri Kurakkan" was far better productive than the varieties developed by the researchers.
 - 2. Farmers of this marginal area accepted research results more easily than expected.
- 4. Community mobilization is important for ownership of the program that leads to sustainability
- 5. Chickpea has been introduced to sites where its growth was not considered viable in one district. Additionally, chickpea was introduced as double cropping, i.e., growing chickpea with residual soil moisture after harvest of the main crop. This ensured harvest of two crops in the same season on land that would have been free after harvest of the main crop using slag labor. The practice has increased the income of the farmers and hence double cropping of chickpea is taken as policy issue the regional government.
- 6. we have good evidence as to the effectiveness of existing national oil fortification requirements in our country (indeed, palm (vegetable) oil is being fortified, although the variance in levels exceeds the tolerances the government recommends. We are investigating further whether all large firms are fortifying as mandated
- 7. Stratégies locales de plantation de bosquet individuel
- 8. The speed with which we were able to get positive results
- 9. The Phase I of the project helped us to understand the science part of the technology development. For instance, during the phase I, 8 students (3 Ph.D & 5 M.Sc) had done their theses. This serves as a strong data base to evolve technology to minimize the post-harvest losses in fruits.
- 10. Development of new partnerships; new research into the social dynamics of livestock farming in South Africa; new research into the micro- and macro-economic impact of livestock diseases in South Africa; skills development in livestock socio-economics in South Africa; gender awareness in research at the ARC.
- 11. Technologie plus efficace que prévu
- 12. Institutional strengthening of Bolivian partners; new Bolivian partnerships; adoption of results by government

- 13. The work conducted in phase I was equivalent to over three decades of previous activity IDRC is to be congratulated for taking a chance on this work.
- 14. Nutrition gardens enriched the household dietary baskets in terms of legumes, vegetables, leafy greens and tubers and reduced their reliance on markets. Fish farming in small ponds helped increase dietary animal protein.
 - Results of the APM Project with emphasis on Neglected and Underutilized Crops finds a place in the Chennai Declaration adopted by 22 countries in the Asia Pacific Region and endorsed by the FAO, IDRC, IFAD, WFP and CGIAR and UN Women.
- 15. Adaption of our technologies by farmers even before we anticipated. More observations coming in from farmers that helped the scientists rethink.
- 16. Results provided hope that it is possible to use the new technology to produce vaccines, both the current and others in the pipeline
- 17. Introduction of millet in mid-day meals in Karnataka
- 18. We identified iron as not being a major contributor anemia
- 19. Graduate student training above those directly involved in the project. For example, through my connections developed with faculty members at Hawassa University during Phase 1, I was able to recruit a great student for an unrelated project at the Univ. of Saskatchewan. The relationship between Hawassa Univ. and UofS continues to grow. Other faculty in my department (Soil Science) have become involved in other IDRC projects, largely because they were able to see and hear the benefits of involvement.
- 20. Wild vegetables that were highly nutritious but were hitherto uncultivated and on which agronomic information were not available have now been brought into cultivation and agronomic packages have been developed for them.
- 21. Substantial interest by US universities in collaborating with McGill on future work
- 22. Candidate genes for resistance against late blight of potato identified, with long term goal. With another opportunity of funding we can develop cisgenic cultivars with high late blight resistance.
- 23. Peasant communities very motivated on genetic diversity conservation. In Cuzco, three communities adopted potato landraces for in-situ conservation and seed production.
- 24. Excellent applied research, capacity building of Canadian students.
- 25. Much as we are just in our first six months of the 28-month implementation period, the Project is noticing appreciation by the farmers, local and central government and private sector. This was not expected this much early.

26. Through improved agricultural practices, improved varieties of seeds and application of vermi compost manure, the productivity of the millet crops increased by many folds. Value addition and proper market linkages of the products not only improved the socio-economic status and health of the local folks but also reduced the drudgery of the women and entrepreneurship development skills through self help groups(SHGs)

27. NONE

- 28. Development of solar powered soil water and temperature sensor, farmers now freely come to the University to discuss issues with other crops not Included in previous project.
- 29. We have identified some antigens, which are prospective candidates for vaccine against more diseases then only the target CBPP.
- 30. Utilisation / value addition to an agricultural waste product (banana pseudostems) to produce fruit wraps which can replace styrofoam cushioning material as fruit transport packaging. This product cam also be used as an eco friendly gift wrap for products other than fruits.
- 31. 1. Increased adoption of smallholder farm practices led to increased production and income, increased income was in many situations invested in improving dwelling houses and also, off-farm.
 - 2. Increased production of green grams for example found its way into the international grain market in India, this had not been anticipated nor expected.
- 32. Combination of social science surveys and GIS based mapping provided novel insights into how demonstration farmers are chosen and what fields they choose for the demonstrations
- 33. Better awareness and coordination among local actors.
- 34. Research work has lead to identifying the blocks in refining processing methods in Millets species diversity
 - Diverse Private and public sector partnerships built around value addition and market chains on Millet crops
- 35. To constitute a strong work team integrated by Colombians and Canadians that work in a transdiciplinary approach and is able to tackle the food security theme in a comprehensive way. This team is a model for Colombia
- 36. The national government became more aware of the sector's potential contributions to food security and food sovereignity; subsequently, new legislation was passed, creating a new national department for the sector with the equivalent of \$80 million USD committed over 3 years to support continued development of the sector and small-scale farmers. Several of the local partner organizations were able to secure funding from the national government for complementary research.

- 37. The motivation of small-farmers to be involved in the activities of field schools established. Several other villages have express the need to have a field school established for them. It could be done at the scaling-up phase. The same goes for the women associations created.
- 38. Some government agencies saw the usefulness of collaborative research

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 1 - Negative:

- 1. Lack of matching support from African governments, the leaders of whom are themselves extremely wealthy!
- 2.
- 3. Researchers had no idea at the planning stage that the involvement of many farmers in this marginal project area of illegally growing cannabis would be a threat to the promotion of small millets by the project.
- 4. Due to lack of sufficient time for intervention, difficult to show the impact of the project
- 5. we have appreciated how difficult it is to use eVouchers for small, regularly purchased items and will likely recommend this not be done in future
- 6. mauvaise gestion à l'échelle inter communautaire
- 7. Lack of urgency at the developing country level
- 8. Since nanotechnology is fairly recent, we spent significant amount of time to basic research. For example, to select a suitable smart delivery systems, we adopted both top down (size reduction through ball milling) and bottom up approaches (nano-fibre matrix and inclusion complexes). Among the tests, we ended up with useful products using bottom up approaches and top-down has been completely withdrawn from our research activities.
- 9. Loss of focus as specialist researchers due to diversification of skills into other disciplines.
- 10. Financement trop bref pour avoir une portée à long terme
 Budget par projet trop important, entraînant une inefficacité par rapport à des projets au financement un peu moins imposant (de l'ordre de 200 000 \$ par année par exemple)
- 11. Inadequate time to address the real issues facing communities
- 12. At the commencement of the project numerous small scale enterprises like bee keeping, medicinal plants were initiated and the team faced difficulty in sustaining them. After the First Project Advisory Committee it was restructured and narrowed down to specifics like kitchen garden.

- 13. Too much pressure on the researchers from the farmers!
- 14. It was unfortunate that our work could not be continued in phase II.
- 15. Lack of continued technical support has halted the progress
- 16. Fishponds did not add much to plant based HFP
- 17. None.
- 18. The popularization of the vegetables brought so much pressure on the research team in terms of request for improved seeds and production information. It was a lot pressure coping with the needs of the farmers.
- 19. Diminution of the level of engagement from developing country partners following the conclusion of the project
- 20. The peasants and local authorities do not organize associations in order to continue working on the project.
- 21. NONE
- 22. Glut of vegetables I market diem to. Dover production.
- 23. The short project timeline makes it difficult to establish and use a new research partnership: for example synchronizing the all administrative aspects between an African and a Canadian institution can easily take an year, which gives you only 18 months for full-scale collaboration.
- 24. Not applicable
- 25. 1. Of the wide array of technologies and practices evaluated by smallholders, farmer groups ended up narrowing this rage in favour of the more profitable practices for example, farmers after just 2 seasons, began to eliminate crops not deemed profitable, potentially reducing biodiversity.
 - 2. Increased yields may lead to reduced soil plant nutrient stocks if farmer access to fertilizers is not addressed.
 - 3. Some practices offered by researchers and which did not perform well, e.g., the improved indigenous chicken breed may impact negatively on the future messages we offer.
- 26. Sometimes knowledge doesn't transfer through the villages as intended
- 27. Difficulty for small-scale farmers to implement some of the recommendations on control measures against the lethal yellowing disease of coconut. Cutting down the infected trees is difficult to implement. It will cost more to farmers to cut the trees even if they are willing to do it. Additionally, if the infected trees still bear fruits, they would like to harvest the fruits before. Meanwhile the disease could be transmitted to other trees. Policy support need as well as continued sensitization.

28. Because of a change in government during the period between proposal submission and grant approval, certain agencies which we identified to work with did not agree to come on board

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 2 - Positive:

- 1.
- 2. Not applicable since the project is ongoing
- 3. Establishment of Regional Pulse Platform, whereby the stakeholders show high interest in the Innovations. This will ensure sustainability after the project phases out.
- 4. n/a
- 5. implication des ONG dans la diffusion des nouvelles technologies
- 6. Engagement of a number of national governments and national private industry
- 7. The Phase II helped us to test the technology at large scale and the Hexanal technology was released for adoption by farmers. Environmental impacts, societal benefits and economic gains from the technology were evaluated and the technology has been popularized through farmers meetings and three village knowledge centers established.
- 8. Additional skills development (e.g. in scaling-up research); gender mainstreaming within ARC; strengthening international Kenyan-South African (ARC)-Canadian government relationships; strengthening of private-sector ties (both national and international).
- 9. Substantial support from Brazilian partners to help in Bolivia
- 10. Partnerships developed between private sector partners.
- 11. Our organization did not qualify for Phase 2 and hence I am unable to make a comment
- 12. Involvement of companies to adopt the technology fro commercial production.
- 13. Equipment installed is the first of its kind for animal health research in Sub Sahara Africa and will be used for purposes far beyond the purpose of the project, to create a centre of excellence for both human and animal health vaccines research under one roof
- 14. N/A
- 15. Seems to be a big uptake of private enterprise taking up fish hatcheries
- 16. We have succeeded in achieving fertilizer cost-saving through micro-dosing of fertilizer for vegetables production. This approach will also hopefully assist to conserve the soil ecosystem. International cooperation is also fostered through anglophone-francophone relationship.

- 17. Creation of farmers producer companies and linking of urban poor consumers with producers.
- **18. NONE**
- 19. The chance to establish a new Product Development Centre, which can streamline the path from basic research to veterinary pharmaceutical product in Africa.
- 20. It was possible to develop a composite banana fibre polymer board with slow release capability of Hexanal to be placed in fruit packs for use as a means of extending storage life of fruits during long distance transportation.
- 21. Access to inputs seem to not be a major constraint for vegetable farmer cooperatives
- 22. Network of actors (NGOs, communities) still working to some extent in coordination.
- 23. To develop synergies further than expected, but we are just at the beginning of the project

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 2 - Negative:

- 1.
- 2. Not applicable since the project is ongoing
- 3. n/a
- 4. manque d'initiatives de soutien de la diffusion à l'échelle nationale
- 5. Segregationist of local agency policies
- 6. Despite the fact that hexanal technology has been proved beyond doubt effective in various mango production systems across the State of Tamil Nadu, the licensing of the compound is still pending which is a bottleneck in commercialization of the technology.
- 7. No comment
- 8. Apparent government resistance to innovations (so far)
- 9. A lack of understanding by IDRC of the research translation process in the area of our project, especially in areas such as intellectual property and commercialization.
- 10. Our organization did not qualify for Phase 2 and hence I am unable to make a comment
- 11. Too early to comment
- 12. There is a lot of pressure to show results in a short time.
- 13. N/A

- 14. Less uptake when women have to pay for HFP
- 15. No negative noticed yet.
- 16. NONE
- 17. Some professional jealousy by scientists who have worked on the same disease with less success.
- 18. Not applicable
- 19. Markets for indigenous vegetables will be the primary limitation on productivity
- 20. We are at the begining of the project, so we should wait for the project results

8. Please list three main strengths or positive aspects of CIFSRF. | Strength 1:

- 1. The people we dealt with all seem engaged and willing to help.
- 2. Wide exposure to know the social and conomical conditions of the millet growing countries
- 3. Could be one of the very few programmes promoting high quality research in the field of poverty reduction
- 4. Effective collaboration and partnership
- 5. Strong evaluation of the proposal before approval.
- 6. focus on very practical projects
- 7. adéquation des thèmes
- 8. Allowed a novel approach to improving small holder farmers welfare
- 9. Scientific Manpower: Indeed, CIFSRF project helped us to build scientific manpower in the cutting-edge nanotechnology. The understanding of the technology has increased exponentially from ground zero to one-thousand during the past four years. In total 24 researchers in the phase I and 18 researchers in phase II have been trained in the fascinating field of nano-science and technology. Altogether, 16 masters and Ph.D. theses had been done. Six of researchers got their faculty positions. One Student (Ms. Sindhiya) got International ICAR fellowship to pursue her Ph.D. at the University of Guelph, Canada. We have got at least 18 publications in various peer-reviewed national and international journals. The Department of Nano Science & Technology, TNAU, Coimbatore, retained its manpower primarily through CIFSRF research funds.
- 10. Adequate funding for e.g. travel, research and infrastructure development.
- 11. Focus sur la recherche en sécurité alimentaire

- 12. Substantial programming support and expertise from IDRC
- 13. Willing to take a chance on research that is high risk (and high benefit)
- 14. Focus on applied research in agricultural development and nutrition in developing countries
- 15. Being to to develop appropriate collaboration with developing countries
- 16. CIFSRF provides an opportunity for partnerships and resources to advance new research ideas that could have died off without seeing the light of day
- 17. Supporting research to inform food security policies
- 18. The objectives of food security
- 19. Reporting and accountability have become more streamlined and consistent over time or we have gotten better at it
- 20. Good in country (Ethiopia) support from CIFSRF.
- 21. The monitoring and evaluation system is excellent.
- 22. Partnership building
- 23. Excellent field work team; excellent guidance;
- 24. Research food security and sustainability together with Canadian expertise.
- 25. addressing the issue of food security in comprehensive and interdisciplinary framework
- 26. CIFSRF is supporting a felt need interventions such as food security and human nutrition
- 27. Improved technology
- 28. SOME FLEXIBILITY IN THE USE OF FUNDS
- 29. Conduite des recherches sur des aspects de sécurité alimentaire prenant en compte le genre
- 30. people working there
- 31. It is targeted at the poor communities
- 32. Good, contemporary strategy: CIFSRF programs have already integrated socio-economic analysis into vaccine development when others (Horizon 2020) were only starting to include it.
- 33. Detailed documentation and reporting required. Provide opportunities for graduate students to develop research and leadership skills
- 34. Opportunities for international collaboration and sharing of knowledge and expertise between developed and developing countries.

- 35. The level of funding and the time allowed for phase was enough to cover sufficient for "a critical mass of activities" to enable research whose results had lasting impact on smallholder livelihoods at household, community and regional levels.
- 36. Novelty of doing Research into Development rather than purely research or development.
- 37. Selection of research themes
- 38. One of the few programs supportig food security from a multidisciplinary approach.
- 39. Monitoring
- 40. The trust given to the research team for project implementation
- 41. Providing support to address poverty and food insecurity through both direct and indirect pathways simultaneously.
- 42. Adequate guidance and support by the project officers
- 43. Provided opportunities for networking among interested groups

8. Please list three main strengths or positive aspects of CIFSRF. | Strength 2:

- 1. Very thorough due diligence.
- 2. Highly flexible in carrying out the activities and programme for the promotion of millets
- 3. Strong focus on food security which is a critically important element in poverty reduction
- 4. Addresses all the important component of Food Security including gender and scale up strategy
- 5. Clear strategy to ensure environmental sustainability, gender equity and food security.
- 6. encourages partnerships with NGOs
- 7. Suivi technique
- 8. Provided continuous support and assistance when needed
- 9. Infrastructure: We have strengthened the infrastructure through CIFSRF funding. We procured a wide array of high-end equipments worth over 400,000 CAD. The Center maintains all equipments in working conditions and each being handled by research staff. Indeed, the sound infrastructure assisted us to achieve desirable nano-based products that are being tested for their commercialization.
- 10. New skills development (e.g. gender, scale-up, communication).
- 11. Focus sur les exploitants les plus pauvres

- 12. Generally adequately funded
- 13. Formation of multinational partnerships
- 14. Promoting research collaboration with developing country partners
- 15. Ability to test the innovation in a diverse, large scale setting
- 16. Partnering through CIFSRF provides opportunity for capacity building among scientists in developing countries. Emphasis on gender mainstreaming and small scale farmer approach gives high profile to the relevance of CIFSRF activities
- 17. Promoting collaboration between developed and developing country partners
- 18. Flexibility in budget allocation so able to be responsive to changing needs
- 19. Good communication with CIFSRF.
- 20. The system of fund release is also excellent allowing for ensuring value for money in project execution.
- 21. Project financing
- 22. Excellent one to one relation;
- 23. Conduct research in rural and poor area, in-situ creating capacities
- 24. Draws upon mutual strengths of Canadian and Southern partners
- 25. CIFSRF is supporting 'orphanage' crops which are normally overlooked much as they are immensely contributing to contributing to food security, nutrition and economic gain.
- 26. On time proper guidance by the experts
- 27. SUBSTANTIAL AMOUNT OF FUNDS AT EVERY DISBURSEMENT
- 28. Mettre ensemble des équipes de recherche du Canada et des pays du Sud
- 29. International network
- 30. Provision of adequate fund
- 31. Intensifying the global involvement of scientists in Canadian research and thus advertising innovation "Made in Canada". Increasing awareness that Canada is the go-to country for high-tech solutions.
- 32. Program Officers work closely with the research team and are extremely supportive. Provide opportunities for strengthening research skills, communication, management and leadership skills. Encourages collaboration at all levels: local, regional and international among stakeholders and at the Governmental level.

- 33. Enable researchers from developing countries with limited resources to develop and conduct research programmes beneficial to rural communities.
- 34. Capacity building: allowed research teams from different professional cultures, orientations and mandates from KARI and McGill to build each other. For example, KARI researchers were able to contribute a rich understanding of developing country smallholder farming and livelihood and a wealth of skills and experience in the conduct of adaptive research. McGill researchers were able to provide to the work of the project and Kenyan counterparts invaluable input in form of framing research questions, analytical inputs and communicating research findings from a global perspective. An example, joint graduate student programs.

It provided opportunity for sharing among projects in different regions of Africa and globally.

- 35. Combining socioeconomic and biophysical work in a meaningful way.
- 36. Multidisciplinary team
- 37. Possibility for multidisciplinary research.
- 38. Training and Capacity building
- 39. The flexibility to evolve proposals presented
- 40. Promoting partnerships and capacity development among both Canadian and developing country researchers, and providing support to each partner equally.
- 41. Flexibility: the ability to make some changes well justified, as the project evolves
- 42. Sizeable funds

8. Please list three main strengths or positive aspects of CIFSRF. | Strength 3:

- 1. Aware of the needs of the African countries.
- 2. Interaction between the scientist working in the same area of operation is highly productive.
- 3. Respect for community and NGO participation in research
- 4. Develop/Create the right platform for food security and bring all the national partners together to address food security at the national level
- 5. Excellent support and backstopping from the program officers.
- 6. partnership with universities in LMICs
- 7. Soutien financier
- 8. Provided the required resources

- 9. Capacity Building Programs: The CIFSRF project provided financial support for conducting hands-on-training on "Genomics" (14 researchers) and "Electron Microscopy (2 faculty from Sri Lanka)". Both faculty and research staff were exposed to training in UoG, Canada and visited other countries such as Sri Lanka, Tanzania and Canada for review meetings. As the PI of the Project, it gave immense opportunity to deliver talks at various international forums eg. Feed Africa in Ethiopia, United Nation Open Innovation Forum in Malaysia, International Conference on Family Farms organized by MSSRF, Chennai. This project has provided strengths to get additional research grants from national level funding agencies in India. I am one of the Conveners in ICAR Nanotechnology Platform Projects in the country with a budget of 50 million CAD.
- 10. Partnership development
- 11. Focus sur les femmes
- 12. Opportunities for networking
- 13. Involvement with food security policies and programmes and extension of support for scaling up promising field results
- 14. Taking the innovation to commercial levels and reaching its capacity
- 15. CIFSRF governance structure with program officers gives a PI a sense of needed shielding from those host institution requirements unrelated to the project
- 16. being actively involved in research to inform development activities
- 17. IDRC staff take a real hands-on approach, are there to work through issues in a collegial manner
- 18. Planning workshops in Ethiopia were very valuable.
- 19. The IDRC Programme Specialists are also very competent especially in the area review of technical reports, field visits and overall project monitoring.
- 20. IDRC personnel support for project implementation and governance
- 21. Taught us how to do the job right.
- 22. promote research, copnservation and utilization of native genetic resources
- 23. Provides excellent opportunity of Canadian students to pursue applied research
- 24. Has made it possible for different stakeholders to work together in attaining a common goal.

 This approach has helped in reminding stakeholder members that using different expertise from each stakeholder adds value.
- 25. proper monitoring
- 26. SOME CLOSE FOLLOW UP ON USE OF DISBURSED FUNDS

- 27. Le souci de faire de l'agriculture une opportunité d'affaire, c'est à dire partir de l'agriculture pour impliquer des entreprises privées
- 28. working with local groups and local governments
- 29. Good monitoring strategy
- 30. Citizen diplomacy: delivering solutions through partnering with local manufacturers, both government and private, makes very strong impression in the African countries, projecting the image of Canada as a friend and partner. "Between profit and friendship, we choose friendship."
- 31. Outcome oriented. Set detailed timelines to complete research activities and achieve outcomes.
- 32. Programme provided finnancial support for human resource development, infra structure enhancement and capacity and building.
- 33. Allowed flexibility: Governance and financial arrangements were flexible, allowing the players in the project from both KARI and McGill considerable room for innovation. For example the "third party" arrangement allowed the teams to co-opt the Kenya Medical Research Institute to address the agriculture, food, nutrition and health as they impact smallholder adoption of efficient practices, and private sector entities to address smallholder market access issues. the governance arrangements allowing the two implementing institutions to work within their respective structures helped ensure that potential for conflicts and wasteful friction were minimized.
- 34. Focusing on women issues will provide the most change with limited funding.
- 35. Flexibility and space for being creative
- 36. Flexibility of the Program.
- 37. Guidance
- 38. Excellent communication and support received by IDRC
- 39. Combination of research-for-devenment and development outcomes.
- 40. Adequate financial support to implement the activities identified.
- 41. Linkages to Canadian researchers

9. Please list three main weaknesses or areas that could be improved of CIFSRF. | Weakness 1:

- 1. Having to completely re-do the forms from the original submission proved frustrating.
- 2. The timelines are very rigid

- 3. Bureaucratic delays
- 4. Short duration of CIFSRF project. Strongly recommended to increase the duration of the CIFSRF project to achieve all the research objectives and get the impact of the research project
- 5. too much politics
- 6. Short duration of the project for wider impacts.
- 7. paperwork is heavy I didn't answer the online questionnaire, but I think it duplicated the technical report, and wasn't available on time
- 8. mauvaise constitution d'équipe nationale
- 9. Time lines are very short based on what needs to be done
- 10. Involvement of NGOs: Despite the fact that NGOs are needed to reach the unreached through outreach programs, their activities are not to our expectations.
- 11. Misrepresentation/reporting of research outputs by IDRC and other media sources contracted by IDRC (this has resulted in strained relationships with state departments)
- 12. Durée trop brève du financement pour chacun des projets. Avoir un impact important auprès des exploitants agricoles à si court terme est utopique. Il vaudrait mieux mettre à la disposition des chercheurs des budgets plus modestes, mais sur du plus long terme, et faire confiance à un nombre plus vaste de chercheurs, plutôt qu'à un nombre restreint de chercheurs, comme on l'a fait dans ce programme.
- 13. Short time frame of projects
- Lack of international business knowledge within IDRC
- 15. Shift in emphasis from state / academy driven development for poverty reduction to private sector led development and innovation for poverty reduction
- 16. Not enough guidance on the partners or potential difficulties
- 17. Level of budget control is strongly pegged on the proposal. The element of innovative research suggests a likely lack of past experience to do an accurate budget in some aspects of the work and therefore calls for flexibility from program officers as long as the expenses remain within the overall budget approved for the whole project period
- 18. Implement effective processes to ensure that institutional partners have appropriate agreements in place PRIOR to the commencement of projects
- 19. short duration of projects is challenging to have lasting results
- 20. Reporting and accountability were onerous and constantly changing at beginning

- 21. The partner countries need to be educated regarding publishing research papers. Unfortunately, researchers in developing countries are put under pressure to publish and they can easily fall victim to predatory journal publishers. Publishing research results in good quality journals should be emphasized.
- 22. I think the monitoring and evaluation system needs to be more strengthened.
- 23. Inadequate time for project implementation and partnership building, especially in countries with weak institutional capacity
- 24. Genome editing is an excellent technology and millions of developing country poors can benefit from cultivars with improved resistance to diseases. They can not afford pesticides. Canada can significantly help in this area.
- 25. To follow more frequently the activities
- 26. Too much pressure on pre-decided outputs/ milestones.
- 27. It is too early to single out any weakness
- 28. BETTER TECHNICAL GUIDANCE
- 29. Durée des projets très courte (3 ans)
- 30. too bureaucratic
- 31. Students training not emphasized
- 32. Short project duration, especially for newly forming partnerships.
- 33. Scope of project and timeline for completion should be carefully determined
- 34. Requirement of same type of output impact from widely differing research programmes in widely differing social and cultural environments.
- 35. Phase 1 inception period was not enough to facilitate adequate preparation. In our case, we used the first season (out of the 6 available) on tasks like putting teams together, procurement, students, etc.
- 36. Reporting instruments are incredibly painful
- 37. High expectation on scaling up in a very short time
- 38. Time frame for projects has been limited.
- 39. Limited Field based supervision of project
- 40. Connect immediately phase 1 to phase 2, in those successful projects in the view of those who have made project monitoring, not necessarily make a call for phase 2.

- 41. The program materials available online lack a clear and concise definition of guiding concepts for the program such as food security, poverty reduction, scale-up. The thematic and regional workshop events that were supported by the program were very useful in bringing together researchers with diverse perspectives and experiences, an event like this with a focus on 'pathways to food security', or 'links between innovation and poverty reduction' would be very topical. Also, there is a lack of program events that provide opportunities for networking and peer-to-peer learning among representatives of local and national governments, civil society and project beneficiaries. At least some opportunities to showcase exceptional leadership and innovation by leaders of some of these actor groups would be very relevant to program overall.
- 42. Reviewing of proposals placed too much emphasis on science and less on the impact of outcomes on food security

9. Please list three main weaknesses or areas that could be improved of CIFSRF. | Weakness 2:

- 1. There should be more flexibility to move faster and make some revisions to the objectives, because once approved the project can change a little in scope.
- 2. The period of project is less . Atleast it should be for five years.
- 3. Limited flexibility
- 4. Considering appropriate project starting time for projects dealing with planting of rain-fed crops depending onset of rain.
- 5. please note that for question 7 since ours is a Phase 1 only project, I can't answer the Phase 2 question. But the questionnaire refused to allow me to proceed without responding hence why I responded "not able to judge" you need to amend your analysis accordingly
- 6. mauvais choix de coordinateur régional
- 7. Expecting developing world partners to have the same work ethic that Canadians do to get things done on time/.
- 8. Financial: During the first phase of the project, financial reporting was done annually which is good and appropriate. In the Phase II, we are asked to provide financial statement every six months which impedes the purchase processes which eventually cause administrative delays.
- 9. Forcing global agendas on developing countries, without prior knowledge (and/or awareness) of local sensitivities.

- 10. Gestion administrative trop lourde : une grande transparence est certes nécessaire, mais pas quand elle se fait au détriment de l'efficacité des projets. Les chercheurs doivent consacrer beaucoup trop de temps à rapporter ce qu'ils font, notamment au plan administratif et financier, plutôt qu'à travailler à atteindre les objectifs de leur projet.
- 11. Not much interaction between different CIFSRF projects
- 12. At times, the relationship between IDRC and our African colleagues was almost adversarial in nature
- 13. Too much pressure by anyone and everyone when there is success
- 14. Lack of clarity on depth or extent of guidance from program officers. PI not knowing if asking for too much. This may contribute to the low degree of trust from program officers as felt by some of the research teams. There have been situations where one has to balance between acting on the advice of the Scientific Advisory Board and that of the Program officer. In one instance, the project defined communication as a research topic to establish reasons why past efforts have not led to adoption while program officers defined communication as using available methods to reach a wider audience
- 15. Active involvement in research activities by the funder could be, at times, stifling
- 16. Convincing partner of the need for rigorous and timely data collection which could be encouraged more by CIFSRF
- 17. Phased fund release on CIFSRF projects should be tied to satisfactory on-the-spot evaluation of field work. Therefore, IDRC will need more staff or consultants to assist in evaluating projects before fund is released.
- 18. Undue administrative burden project reporting and technical accountability
- 19. should promote to write more scientific papers
- 20. Slightly too much demand on periodic reporting.
- 21. It is too early to single any weakness
- 22. INCREASE FLEXIBILITY IN UTILIZATION OF RESOURCES AND TIMELINES
- 23. inflexible when it comes to budgets, reports, etc.
- 24. Non assistance with equipment purchase
- 25. Travel limitations can make execution of international projects difficult.
- 26. Inadequate time frame for the research team to build working relationship
- 27. Lack of an apparent user friendly format / framework for reporting progress.

- 28. End of project was so firmly fixed, there was little provision of what happens after the project.

 Thus there was little provision for follow up of or consolidation and dissemination of the significant lessons from the project.
- 29. Lack of provision for continuity to many of the potential research results in phase I
- 30. Need for phase 2 to support more policy oriented work which is longer term.
- 31. The time to implement projects in phase 2 is not enough so, I recomend to increase the period for implementing projects in phase 2 at least during 3.5 years.
- 32. The program would benefit from greater visibility online through a simple google search, it is difficult to even find a webpage associated with CIFSRF that explains what the program does and why Canadians should feel good about it.
- 33. Could have supported more regional interactions both for research approaches as well as on new innovations

9. Please list three main weaknesses or areas that could be improved of CIFSRF. | Weakness 3:

- 1.
- 2. Wider donor recipient gap
- 3. projets sans production scientifique
- 4. Reporting: Technical Reports are submitted once in six months and being evaluated by a team in IDRC. They take more time for evaluation which delays the release of funds and research activities
- 5. Les chercheurs ne sont pas les meilleures personnes pour faire du développement. Une meilleure intégration de la recherche au développement est certainement nécessaire. Mais les chercheurs devraient surtout être encouragés à faire de la recherche, en lien bien sûr avec les organisations de développement, mais en laissant à celles-ci la responsabilité d'oeuvrer pour le développement.
- 6. Not well designed for Canadian NGO participation in terms of cost structures
- 7. Too much pressure on things that may not be relevant to a particular project
- 8. Nothing else comes to mind
- 9. Time commitment for Canadian academics who don't get paid to work on projects and get little relief from other duties from universities. If a PI says they are 0.4 they are not relieved of 2 days a week of regular duties.

- 10. Inadequate coverage of indirect cost for university administration; need for extended period for covering cost of scientific publications from project
- 11. Promote at least a meeting in Canadian Universities, in order mto spread the results
- 12. Timeline is often too short and pressure to engage private sector.
- 13. It is too early to single any weakness
- 14. NO COST EXTENSIONS
- 15. Lack of funding for student training programs. Training funding is available and encouraged by CIFSRF, but project timeline is insufficient a post-graduate training.
- 16. IDRC Programme Managers need to ensure that countries that host progress review meetings organize meeting programmes so that money used on travel to the meeting destination is well used. Collaborating partners should be given opportunities to dicuss project activities and programmes in detail and learn from the context in which the host country team has been working. I experienced an occasion where paricipants travelled from across the world- the West Indies, Africa and Canada -spending huge amounts of project funds on air fares for a 2 day meeting couped up in an expensive hotel meeting room in the Indian sub continent!! Unlike businessmen, researchers are creative persons and need to be intellectually stimulated and inspired by what they see and absorb from partnering country researchers and research environments.
- 17. Some requirements as to how or what the funds may be used for may have been restrictive or in some cases, resulting in delays between procurement and execution of field activities.
- 18. Less than adequate capacity building support to project holders
- 19. Need for better and more integrated approach with Canadian research institutions.
- 20. The funds in phase 2 are small according to the expectations from CIFSRF. Implementation costs vary according to the country where the project is implemented and this can generate large differences, for example between Africa and Latin America
- 21. The duration of projects is too short to achieve adequate development impact. The time between funding cycles is too long, the expectation of time and human resource investment in proposal development phase is too high, the combination of these makes it inefficient. Also, it is very difficult for smaller not-for-profit organizations to be engaged in the process. We had 4 staff members from two organizations volunteering full-time for 8 months to complete final reporting for our Phase I project and revisions to our Phase II project before it was finally approved.
- 22. IDRC could have done more to integrate out-come mapping as a means for M&E

10. Phase 1: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall? |

	you with Cirskr overall?
#	Response
1.	8.5
2.	8.5
3.	7
4.	9
5.	5.5
6.	9.5
7.	10
8.	10
9.	10
10.	8.5
11.	7.5
12.	8
13.	7
14.	8
15.	8.5
16.	9
17.	7.5
18.	7.5
19.	8.5
20.	9.5
21.	10
22.	9
23.	9.5
24.	10
25.	10
26.	10

#	Response
27.	8
28.	8
29.	9
30.	8
31.	6.5
32.	9.5
33.	9
34.	9.5
35.	9
36.	10
37.	8
38.	
39.	
40.	
41.	
42.	
43.	9.5

11. Phase 2: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall? |

	700 00000000000000000000000000000000000
#	Response
1.	1
2.	9
3.	5.5
4.	8
5.	5.5
6.	10
7.	10
8.	9

#	Response
9.	8.5
10.	8
11.	7.5
12.	8.5
13.	9.5
14.	10
15.	
16.	
17.	
18.	
19.	
20.	
21.	
	9.5
23.	
24.	
25.	
26.	
27.	
28.	
29.	1.5

12. Please list your top three suggestions or recommendations for improving CIFSRF? | Recommendation 1:

Response

1. As so few projects are approved, it would seem worthwhile to have CIFSRF nominate one staff member to come to the Canadian grantee site for 1-2 days and make sure all documents are refined and completed, and everyone is on side. The same is true in Africa, where a one day meeting with collaborators could speed up the process.

- 2. The scientists involved in the shortlisted proposals may be invited for a workshop to improve the final programme.
- 3. Reducing bureaucratic delays
- 4. Increase the duration of the research project and to make it at least 4 years
- 5. Increase the duration of projects that with field research for wider impacts and greater adoption.
- 6. continue the funding it takes a lot of time to get innovative work going in new areas
- 7. implication transparente dans le choix du coordinateur régional
- 8. It is working very well. Don't tinker.
- 9. The CIFSRF project helped us to equip human resource, infrastructure, capacity building besides commercialization of few nano-based products. The efforts undertaken should benefit large number of countries and people. The team may be given chance to lead another project after the expiry of phase II in 2018.
- 10. Better two-way communication/discussion for ensuring accurate project reporting
- 11. Faire confiance à un plus grand nombre d'équipes de recherche
- 12. Projects of longer duration
- 13. The scale in which projects are operated needs to be clearly defined at the commencement of a project. This will enable implementing agencies with a vision for scaling up successful innovations.
- 14. Some more guidance on the number and capacity of partners based on past experience
- 15. Explore ways of balancing involvement of program officers in implementation of project decisions. Currently not clear what is good enough
- 16. Make reporting less frequent and less onerous
- 17. Longer span projects
- 18. More cross-project meetings. An annual meeting of Canadian investigators alone to discuss common issues. i.e. working with in-country partners understanding their motivations, which are often very different than CDN academics
- 19. Phased fund release on CIFSRF projects should be tied to satisfactory on-the-spot evaluation of field work. Therefore, IDRC will need more staff or consultants to assist in evaluating projects before fund is released.
- 20. Project funding period should be 5 years with the first year devoted to partnership building

- 21. Increase funding to Canadian institutions. May be we can provide more for the unit dollar; all the same making sure the recipients are happy.
- 22. The results in the first phase should be up scaled, at least for some activities with high impact
- 23. Keep flexibility of time frame.
- 24. As responded above under Item 9
- 25. Extension and replication of the programme in other area
- 26. HAVE NO COST EXTENSIONS
- 27. Ramener la durée des projets à 5 ans
- 28. less red tape, more flexible, focus on the research goals
- 29. Establishment of new research and development partnerships requires time. It may be appropriate to devise a short period (~6 months or shorter) for the future collaborators to draft and sign the necessary MOU, Contracts, Material Transfer Agreements etc. However this period should only be sufficient for these activities in order to stimulate the participating institutions to expedite contracting.
- 30. A period for the research team and partners to build working relations and communication at the beginning of the project would be useful.
- 31. Smooth financial transition between phases -e.g., Phase 1 to Phase 2. Waiting for funds between phases can be very disruptive with respect to retaining contract staff.
- 32. Maintain phase 1 levels of funding this helped in the development and implementation of research for development with discernible impacts on critical dimensions of food security at the community and households.
- 33. 3 year project durations make it difficult to study more long term changes or evaluate the successes of scaling up.
- 34. Create provision for giving continuity to potential research results in Phase I, to make the already made investment more productive
- 35. Continue funding policy oriented research.
- 36. Improve Physical monitoring plan
- 37. To extend the time for implementation of projects for phase 2
- 38. Lengthen the duration of projects to up to 5 years.
- 39. The first payment of the project fund should cover the whole expenses for equipments. It will improve the availability of those equipments on time for the project implementation. Provide a short training on financial reporting.

40. Greater use of non-govt agencies and private sector organisations

12. Please list your top three suggestions or recommendations for improving CIFSRF? | Recommendation 2:

- 1. Be more flexible with time. Our project was shortened by four months because of the Ugandan government compliance bureaucracy which was unnecessary and out of our control.
- 2. Duration of the meetings may be shortened.
- 3. Making operations more flexible
- 4. Organizing workshop is an excellent initiative like scale up and gender workshop. If possible, suggest to organize more workshop on other important areas like sustainability, documentation, developing policy brief etc
- 5. The approval of proposals and release of fund should take into account the planting time for projects dealing with field crops using rain.
- 6. la supervision technique de l'équipe internationale
- 7. Financial Report : Reporting may be made as annual like in Phase I which minimizes administrative delays.
- 8. Better planning for continuity between project phases.
- 9. Financer les projets sur un plus long terme
- 10. Opportunity to address more of the underlying aspects of food insecurity, not only targeted single solutions
- 11. CIFSRF needs to undertake post project evaluation studies of projects to enable assess its impact
- 12. Appropriate starting time so we don't have to sacrifice our holidays. Seriously!
- 13. Need for some introductory lessons to finance personnel on reporting expected from institutions hosting the projects
- 14. Be clear in feedback which is provided to researchers
- 15. Limit the size of partnerships (easier to handle and deliver on)
- 16. Monetize the value of the CDN university in kind support and recognize it. If CIFSRF had to pay for academics time, like most American granting agencies do, these projects would cost millions more. Country partners are paid to work on projects.
- 17. Monitoring and evaluation of projects should be more strengthened.

- 18. The indirect cost of project funding for university should be increased to 20 to 25%.
- 19. To push to write protocols, manuels, catalogs or papers
- 20. Reporting shall be once year.
- 21. As responded above under Item 9
- 22. Must be coordination after completion of the projects between McGill University, Canada for technical backup and implementing organization for sustainability
- 23. HAVE RELEVANT TECHNICAL MANAGERS
- 24. Augmenter les financement
- 25. get more buy in from local governments. if they have skin in the game they would support the research more.
- 26. Travel limitations: in an international project a lot depends on the personal involvement of scientists and students across national borders. travel is inherent to such projects and should not be limited by anything but the eligible expenses guidelines. It may be even beneficial to require some minimal number of site visits by all teams.
- 27. A one day workshop on the preparation of the technical report would be beneficial for new researchers
- 28. A user friendly format for submission of progress reports.
- 29. Invest more in addressing the post-project issues a clear vision on what happens after the project will be very useful if it is part of the project inception.
- 30. Creating space for further continuation of Phase Ii project, based on the results, to continue the momentum generated and to support scaling up to reach large number of end users
- 31. Try to extend time frames for projects to 4 5 years.
- 32. Recruit National staffs in Regional projects monitoring
- 33. The call for projects for phase 2 to do more simple and understandable
- 34. Reduce the amount of time between funding cycles
- 35. A scaling-up phase opportunity should be offered to projects having good perspectives.
- 36. Give a higher weightage on the relevance of the proposal to the local problem targeted, compared to the methodological or scientific approaches used to provide evidence of research

12. Please list your top three suggestions or recommendations for improving CIFSRF? | Recommendation 3:

- Work with foreign governments and make them commit to matching some of the funding, even by providing personnel who they already pay (for example scientists at NIMR who do very little) to work on these projects. Even providing these scientists with some lab funding would be hugely useful for the engagement and sustainability. I think Canadians would like to see that their money is being matched in some way, and appreciated by foreign governments that is often not the case at all.
- 2. A provision may be included for the actual stake holders to visit other countries and see the improved operations pertaining to the project.
- 3. Reducing donor recipient gap
- 4. obligation de résultats scientifiques, techniques pour les développeurs et de résultats pour les décideurs
- 5. The University KVKs (Krishi Vigyan Kendras) may be involved in social research instead of NGOs
- 6. Utilise improved M&E tools (e.g. newer reporting templates/forms/online resources)
- 7. Réduire les contraintes administratives et financières
- 8. Greater opportunities for learning between projects
- 9. Reduce the frequency of reporting so we can do the work
- 10. Research projects will need longer period of sustained funding to realize best, long-term goals
- 11. The positive benefits of agricultural interventions on nutrition and health take far longer than traditional nutrition interventions such as fortification or cash transfers. In many cases possibly generational and certainly longer than most i.e stunting. I'm not sure that the intermediaries such as improved HFIAS. dietary diversity are really surrogates of improved nutrition. There needs to be more work put into whether these intermediaries are valid in predicting improved outcome.
- 12. The intervals between interim reports should be re-evaluated with a view to a first technical report after 2 years and 2 year interim reports.
- 13. Should be nominate a permanent manager from CIFSRF for each project
- 14. Allow more role of social science and reduce mandatory element of private sector engagement
- 15. As responded above under Item 9
- 16. Programme must be long term 5-10years
- 17. BE FLEXIBLE ON GENDER PARTICIPATION

- 18. Insister sur les aspects transformation agroalimentaire
- 19. Training of students and scientists from the country-collaborator may merit a separate funding. It may be helpful to have a training fund where foreign students or scientists may apply for scholarships. These may also be used as seed money when one or two year stipend and small research funding provides a proof of concept for future grant application.
- 20. While the flexibility of holding progress review meetings as convenient to the teams is appreciated, prescribed time intervals for progress review meetings need to set in place so that such meetings are held at regular intervals to ensure proper project planning and monitoring.
- 21. CIFSRF (and IDRC) applied uniform requirement on how funds must be spent throughout all projects. Given the reality differences between and among implementing institutions, some flexibility even if applied on a case by case may well eliminate some of the delays experienced in executing project activities.
- 22. Continual capacity building support on scaling up and scaling up research
- 23. Make use of Trained CIFSRF project staffs expertise in ongoing CIFSRF project M&E or capacity building where ever possible
- 24. Give sustainability to those results from phase 1 that need more time and can not be scale-up like an innovation but are essential to develop knowledge in medium term.
- 25. Increase visibility of the program in Canada and online.
- 26. Hold meeting with project leaders and the grant provider and share good practices.
- 27. Try to promote sharing of regional experiences in food production and ensuring food security

13. Please share additional thoughts or comments about any aspect of CIFSRF. |

- 1. Funding should be higher, and include a component of research done in Canada of relevance to the project, and a component to bring back to Canada lessons from the project. Currently, there seems no appetite for Canada to learn from others in developing countries, whose practices or diet etc may be healthier than in Canada.
- 2. -
- 3. Project selection is too central. Suggest a more decentralized process.

4. Current CIFSRF initiatives are great.

Linking Agriculture sector with nutrition and how we can make more nutrition-sensitive agriculture is an important area for Food Security and Nutrition Intervention. In future, it would be great if CIFSRF will give more focus on research to strengthening the sensitivity between Agriculture and nutrition would be great. Now this is an important issue globally for achieving food security and nutrition.

- 5. it's been a very good experience. I think our project will have some very interesting findings, and we very much appreciate that CIFSRF gave us the resources and encouragement to get this going
- 6. les projets FCRSAI suscitent de l'engouement dans les communautés locales mais la fin prématurée ou arrêt brusque du projet laisse un mauvais souvenir de Canada dans le milieu local. Les arrêts de projet pour faute de bonne coordination régionale, arrêt pour insécurité dans le pays sont des critères à revoir.
- 7. Great program
- 8. We are extremely pleased to work with IDRC. The Phase I and II projects are considered livelihood financial support for the genuine cause of nanotechnology research in the country and provided opportunity evolve nano-based technology to minimize the post-harvest losses and maximize the availability of fruits thereby ensure nutritional security
- 9. In general, very well supported/managed. Good communication channels with project coordinator/s, and flexibility within scope of project. Suggest IDRC offers a project management workshop to PIs at outset of new projects.
- 10. My association with the CIFSRF supported project, 'Alleviating Poverty and Malnutrition in Agrobiodiversity Hotspots of India' was extremely exciting, fulfilling and fruitful in engaging with a large number of people and professionals.

I am not in a position to comment on Phase 2 since we did not qualify for the phase.

- 11. Way too much reporting to satisfy the needs. This cuts into our actual working time. Proper guidance on who we can hire and who we cannot. Please continue to encourage the presubmission workshop between potential partners as it had a huge bearing in phase 1. Please reduce our drudgery on this mundane reporting- Pls spend typically 4 months in the year to assemble and report. Improve the financial reporting mechanism-too much to do once in 6 months.
- 12. None

- 13. There is a lot of emphasis on what countries gain from Canadian expertise. The PIs etc. have gained insight into the realities of working in LIC. Also, we shouldn't underplay the value of training given to graduate students. There is a dearth of academics working particularly in nutrition and development in Canada. I think CIFSRF has allowed the training of the next generation of researchers, from early in their careers leading to considerable capacity building
- 14. As far as I am concerned, CIFSRF is doing great. A little more effort in the area of monitoring and evaluation will make a greater impact.
- 15. The professional support from IDRC personnel was exemplary. The CIFSRF model of research for development was a learning experience for academics and could serve as a meaningful model for translating academic research into innovation and international development.
- 16. It was a great opportunity to be part of the project, I got a beautiful training, especially related to food security and multidisciplinary work.

Thanks a lot for this project.

- 17. Excellent initiative and shall be continued.
- 18. I would in the first place congratulate CIFSRF for supporting efforts by smallholder farmers in ensuring that they get helped for ensure they produce enough foot while at the same time enhancing nutrition. This aspect of nutrition is very important for developing countries like Tanzania whereby about 40 per cent of the under five are stunted due to malnutrition.
- 19. Good funding agency
- 20. NONE AT THE MOMENT
- 21. Complex international projects will benefit from a budget which mitigates risk better. It can be done by a separate category, or by increasing the flexibility of transferring money and effort between categories.
- 22. Provides an opportunity for researchers to explore and test new innovations that may not have been possible in some developing countries.

A great learning and rewarding experience.

23. Being part of the CIFSRF programmes has been a very rewarding part of my research carrier. As a scientist based in a developing country, with limited financial resources for research, I have appreciated the support given and the opportunity to interact with researches from Canada and other developing countries.

- 24. CIFSRF support was an effective in addressing sustainable smallholder food security issues. Funding allowed McGill university talent (professors, students and other professionals) to bring expertise to address building resilience in smallholder food security in Kenya. Expertise especially in adaptive research and development of agricultural value chains among KARI researchers benefited the McGill team. This effort yielded results available for up-scaling. However, the project ended without a strategy for dissemination of these lessons: subsequent phase designs should address this.
- 25. Engaging with CIFSRF was an enriching experience for all the partners and resulted in capacity building of the research team and Canadian students. The partnership was extended beyond the project period. I was amazed about the progress made by CIFSRF projects across the continents on relevant food security themes. There is lot of scope for learning for development community and development assistance community.
- 26. CIFSRF has been a valuable source of resources and assistance to undertake multidisciplinary research in food security aspects.
- 27. I am very happy to share with CIFSRF that the strong incidence that our projects have had in Colombia in different aspects, from education until its impact on the political issues, and the maturity that researchers have achieved and strengthening the capacities of Colombian and Canadian teams, we are different from CIFSRF.

CIFSRF Phase 2 Results (Phase 2 combined with Phase 1 + Phase 2)

1. What is your gender identity?

Response	Chart	Percentage	Count
Female		24.4%	11
Male		75.6%	34
Transgender		0.0%	0
Other response		0.0%	0
		Total Responses	45

1. What is your gender identity? (Other response)

Response

2. For which Phase(s) of CIFSRF have you been Principal Investigator of (a) CIFSRF-supported project(s)?

Response	Chart	Percentage	e Count
Phase 1		0.0%	0
Phase 2		53.3%	24
Phase 1 and Phase 2		46.7%	21
		Total Respo	nses 45

3. To which of the following groups does your organization belong?

Response	Chart	Percentage	Count
Government		11.1%	5
University		53.3%	24
Private sector		6.7%	3
NGO (national)		11.1%	5
NGO (international)		13.3%	6
Other (please specify)		4.4%	2
		Total Responses	45

3. To which of the following groups does your organization belong? (Other (please specify))

Response Academic research institute Semi Government or Satuatory Body

4. In which area of the world is / was your project located?

Response	Chart	Percentage	Count
Asia		28.9%	13
Latin America and the Caribbean		20.0%	9
Sub-Saharan Africa		51.1%	23
Middle East and North Africa		0.0%	0
		Total Responses	45

5. Based on your experience and knowledge of CIFSRF, for each statement below, please select the answer that best reflects your views:

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.1 CIFSRF occupies an important niche in the area of food security research for development.	1 (2.2%)	1 (2.2%)	9 (20.0%)	34 (75.6%)	0 (0.0%)	45
5.2 Phase 1 – partnerships: CIFSRF has contributed to improving the capacity of Canadian and developing country partnerships.	0 (0.0%)	0 (0.0%)	9 (20.0%)	25 (55.6%)	11 (24.4%)	45
5.3 Phase 2 – partnerships: CIFSRF is contributing to improving the capacity of Canadian and developing country partnerships.	0 (0.0%)	0 (0.0%)	12 (26.7%)	33 (73.3%)	0 (0.0%)	45
5.4 Phase 1 – new knowledge: CIFSRF has generated new food security innovations.	0 (0.0%)	0 (0.0%)	10 (22.2%)	25 (55.6%)	10 (22.2%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.5 Phase 2 – scaling up innovations: CIFSRF is scaling up promising new food security innovations.	0 (0.0%)	0 (0.0%)	12 (26.7%)	32 (71.1%)	1 (2.2%)	45
5.6 Phase 1 – capabilities: The ability of developing country organizations to undertake relevant research has been strengthened through CIFSRF.	0 (0.0%)	0 (0.0%)	10 (22.2%)	24 (53.3%)	11 (24.4%)	45
5.7 Phase 2 – capabilities: The ability of developing country organizations to undertake relevant research is being strengthened through CIFSRF.	0 (0.0%)	0 (0.0%)	15 (33.3%)	30 (66.7%)	0 (0.0%)	45
5.8 (a) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: Policy- makers in developing countries.	0 (0.0%)	4 (8.9%)	15 (33.3%)	13 (28.9%)	13 (28.9%)	45
5.8 (b) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: The development assistance community.	0 (0.0%)	1 (2.2%)	22 (48.9%)	11 (24.4%)	11 (24.4%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.8 (c) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: The general public in Canada.	0 (0.0%)	8 (17.8%)	15 (33.3%)	6 (13.3%)	16 (35.6%)	45
5.8 (d) Phase 1 – awareness: CIFSRF has contributed to improved awareness of potential solutions to food security issues in developing countries among: The general public in developing countries.	0 (0.0%)	6 (13.3%)	17 (37.8%)	10 (22.2%)	12 (26.7%)	45
5.9 (a) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: Policy- makers in developing countries.	0 (0.0%)	3 (6.7%)	19 (42.2%)	17 (37.8%)	6 (13.3%)	45
5.9 (b) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The development assistance community in Canada.	0 (0.0%)	1 (2.2%)	20 (44.4%)	11 (24.4%)	13 (28.9%)	45
5.9 (c) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The general public in Canada.	0 (0.0%)	6 (13.3%)	21 (46.7%)	5 (11.1%)	13 (28.9%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.9 (d) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The general public in developing countries.	0 (0.0%)	6 (13.3%)	19 (42.2%)	14 (31.1%)	6 (13.3%)	45
5.9 (e) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The private sector: Small-scale in developing countries.	0 (0.0%)	2 (4.4%)	23 (51.1%)	17 (37.8%)	3 (6.7%)	45
5.9 (f) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The private sector: National level in developing countries.	0 (0.0%)	4 (8.9%)	20 (44.4%)	15 (33.3%)	6 (13.3%)	45
5.9 (g) Phase 2 – awareness: CIFSRF is contributing to improved awareness of potential solutions to food security issues among: The private sector: Multinational level.	0 (0.0%)	8 (17.8%)	15 (33.3%)	11 (24.4%)	11 (24.4%)	45
5.10 CIFSRF has contributed to better public policies related to food security and nutrition in developing countries.	0 (0.0%)	4 (8.9%)	18 (40.0%)	14 (31.1%)	9 (20.0%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.11 CIFSRF has contributed to better public programming related to food security and nutrition in developing countries.	0 (0.0%)	4 (8.9%)	22 (48.9%)	10 (22.2%)	9 (20.0%)	45
5.12 Phase 1 – Canadian contribution: CIFSRF has contributed to increased use of Canadian expertise in applied food security research.	0 (0.0%)	1 (2.2%)	12 (26.7%)	24 (53.3%)	8 (17.8%)	45
5.13 Phase 2 – Canadian contribution: CIFSRF is contributing to increased use of Canadian expertise in applied food security research.	0 (0.0%)	1 (2.2%)	11 (24.4%)	32 (71.1%)	1 (2.2%)	45
5.14 (a) Results generated by CIFSRF-funded research have successfully responded to the needs of: Poor communities.	0 (0.0%)	2 (4.4%)	18 (40.0%)	21 (46.7%)	4 (8.9%)	45
5.14 (b) Results generated by CIFSRF-funded research have successfully responded to the needs of: Small-scale farmers.	0 (0.0%)	0 (0.0%)	16 (35.6%)	26 (57.8%)	3 (6.7%)	45
5.14 (c) Results generated by CIFSRF-funded research have successfully responded to the needs of: Small-scale women farmers in particular.	0 (0.0%)	0 (0.0%)	18 (40.0%)	23 (51.1%)	4 (8.9%)	45
5.14 (d) Results generated by CIFSRF-funded research have successfully responded to the needs of: Developing country governments.	0 (0.0%)	1 (2.2%)	20 (44.4%)	15 (33.3%)	9 (20.0%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.14 (e) Results generated by CIFSRF-funded research have successfully responded to the needs of: The Government of Canada.	0 (0.0%)	1 (2.2%)	16 (35.6%)	11 (24.4%)	17 (37.8%)	45
5.14 (f) Results generated by CIFSRF-funded research have successfully responded to the needs of: The private sector: Small-scale in developing countries.	1 (2.2%)	1 (2.2%)	19 (42.2%)	15 (33.3%)	9 (20.0%)	45
5.14 (g) Results generated by CIFSRF-funded research have successfully responded to the needs of: The private sector: National level in developing countries.	0 (0.0%)	3 (6.7%)	19 (42.2%)	12 (26.7%)	11 (24.4%)	45
5.14 (h) Results generated by CIFSRF-funded research have successfully responded to the needs of: The private sector: Multinational level.	0 (0.0%)	7 (15.6%)	17 (37.8%)	3 (6.7%)	18 (40.0%)	45
5.15 CIFSRF-supported research for development has contributed to debates on food security innovation.	0 (0.0%)	0 (0.0%)	20 (44.4%)	19 (42.2%)	6 (13.3%)	45
5.16 Phase 2: CIFSRF is effectively strategizing the scaling up of research results that have potential.	0 (0.0%)	3 (6.7%)	15 (33.3%)	25 (55.6%)	2 (4.4%)	45
5.17 Phase 2: Phase 2 projects are an appropriate continuation of Phase 1.	0 (0.0%)	1 (2.2%)	11 (24.4%)	30 (66.7%)	3 (6.7%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.18 Phase 2: CIFSRF is providing appropriate support for the scaling-up of research results that have potential.	0 (0.0%)	5 (11.1%)	7 (15.6%)	29 (64.4%)	4 (8.9%)	45
5.19 (a) In the case of your project, the results of research have been adopted by: Poor communities.	0 (0.0%)	5 (11.1%)	15 (33.3%)	15 (33.3%)	10 (22.2%)	45
5.19 (b) In the case of your project, the results of research have been adopted by: Small-scale farmers.	0 (0.0%)	3 (6.7%)	16 (35.6%)	18 (40.0%)	8 (17.8%)	45
5.19 (c) In the case of your project, the results of research have been adopted by: Small-scale women farmers in particular.	0 (0.0%)	3 (6.8%)	14 (31.8%)	20 (45.5%)	7 (15.9%)	44
5.19 (d) In the case of your project, the results of research have been adopted by: Developing country governments.	0 (0.0%)	6 (13.3%)	19 (42.2%)	9 (20.0%)	11 (24.4%)	45
5.19 (e) In the case of your project, the results of research have been adopted by: The Government of Canada.	1 (2.2%)	9 (20.0%)	12 (26.7%)	4 (8.9%)	19 (42.2%)	45
5.19 (f) In the case of your project, the results of research have been adopted by: The private sector: Small-scale in developing countries.	0 (0.0%)	8 (17.8%)	14 (31.1%)	16 (35.6%)	7 (15.6%)	45
5.19 (g) In the case of your project, the results of research have been adopted by: The private sector: National level in developing countries.	0 (0.0%)	8 (17.8%)	16 (35.6%)	11 (24.4%)	10 (22.2%)	45

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
5.19 (h) In the case of your project, the results of research have been adopted by: The private sector: Multinational level.	0 (0.0%)	14 (31.1%)	11 (24.4%)	3 (6.7%)	17 (37.8%)	45
5.20 In the case of your project, additional financial resources have been secured to maintain results of Phase 1.	2 (4.4%)	6 (13.3%)	20 (44.4%)	11 (24.4%)	6 (13.3%)	45
5.21 In the case of your project, additional human resources have been secured to maintain results of Phase 1.	2 (4.4%)	5 (11.1%)	17 (37.8%)	15 (33.3%)	6 (13.3%)	45

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project:

Variable Response

Phase 1 – Positive:	The 31 response(s) to this question can be found in the appendix.
Phase 1 – Negative:	The 22 response(s) to this question can be found in the appendix.
Phase 2 – Positive:	The 39 response(s) to this question can be found in the appendix.
Phase 2 – Negative:	The 28 response(s) to this question can be found in the appendix.

7. Based on your experience and knowledge of CIFSRF, for each statement below, please select the answer that best reflects your views:

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.1 CIFSRF has an appropriate gender strategy.	0 (0.0%)	2 (4.7%)	19 (44.2%)	19 (44.2%)	3 (7.0%)	43
7.2 CIFSRF-supported research for development has contributed to improving women's access to resources.	0 (0.0%)	1 (2.3%)	16 (37.2%)	21 (48.8%)	5 (11.6%)	43

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.3 CIFSRF-supported research for development has contributed to improving women's relative power in their communities.	0 (0.0%)	3 (7.0%)	12 (27.9%)	20 (46.5%)	8 (18.6%)	43
7.4 CIFSRF has an appropriate environmental sustainability strategy.	1 (2.3%)	2 (4.7%)	22 (51.2%)	15 (34.9%)	3 (7.0%)	43
7.5 Results generated by CIFSRF- supported research for development are environmentally sustainable.	0 (0.0%)	1 (2.3%)	16 (37.2%)	20 (46.5%)	6 (14.0%)	43
7.6 Phase 2 only - CIFSRF has an appropriate good governance strategy.	0 (0.0%)	2 (4.7%)	18 (41.9%)	16 (37.2%)	7 (16.3%)	43
7.7 (a) Phase 2 only - CIFSRF's good governance strategy is promoting: Greater transparency.	0 (0.0%)	0 (0.0%)	21 (48.8%)	17 (39.5%)	5 (11.6%)	43
7.7 (b) Phase 2 only - CIFSRF's good governance strategy is promoting: Greater accountability.	0 (0.0%)	0 (0.0%)	20 (46.5%)	17 (39.5%)	6 (14.0%)	43
7.7 (c) Phase 2 only - CIFSRF's good governance strategy is promoting: Appropriate inclusion.	0 (0.0%)	2 (4.7%)	18 (41.9%)	17 (39.5%)	6 (14.0%)	43
7.7 (d) Phase 2 only - CIFSRF's good governance strategy is promoting: Appropriate participation.	0 (0.0%)	1 (2.3%)	19 (44.2%)	17 (39.5%)	6 (14.0%)	43
7.7 (e) Phase 2 only - CIFSRF's good governance strategy is promoting: Bottom-up approaches to research and development.	1 (2.3%)	2 (4.7%)	16 (37.2%)	18 (41.9%)	6 (14.0%)	43
7.7 (f) Phase 2 only - CIFSRF's good governance strategy is promoting: Greater equity.	0 (0.0%)	1 (2.3%)	19 (44.2%)	18 (41.9%)	5 (11.6%)	43

	Strongly disagree	Disagree	Agree	Strongly agree	Not able to judge	Total Responses
7.7 (g) Phase 2 only - CIFSRF's good governance strategy is promoting: Decreased discrimination.	1 (2.3%)	0 (0.0%)	17 (39.5%)	16 (37.2%)	9 (20.9%)	43
7.8 CIFSRF has been efficiently planned.	0 (0.0%)	3 (7.0%)	22 (51.2%)	16 (37.2%)	2 (4.7%)	43
7.9 CIFSRF has been efficiently delivered.	0 (0.0%)	4 (9.3%)	25 (58.1%)	13 (30.2%)	1 (2.3%)	43
7.10 CIFSRF's monitoring mechanisms are appropriate.	0 (0.0%)	3 (7.0%)	20 (46.5%)	17 (39.5%)	3 (7.0%)	43
7.11 (a) For the completion of expected monitoring and evaluation of projects, IDRC provides: Appropriate guidance.	0 (0.0%)	2 (4.7%)	20 (46.5%)	19 (44.2%)	2 (4.7%)	43
7.11 (b) For the completion of expected monitoring and evaluation of projects, IDRC provides: Appropriate technical support.	0 (0.0%)	5 (11.6%)	19 (44.2%)	16 (37.2%)	3 (7.0%)	43
7.11 (c) For the completion of expected monitoring and evaluation of projects, IDRC provides: Adequate time.	1 (2.3%)	4 (9.3%)	25 (58.1%)	12 (27.9%)	1 (2.3%)	43
7.12 For Phase 1, CIFSRF has provided good value for the funds expended.	0 (0.0%)	0 (0.0%)	14 (32.6%)	22 (51.2%)	7 (16.3%)	43

8. Please list three main strengths or positive aspects of CIFSRF.

Variable Response

Strength 1:	The 42 response(s) to this question can be found in the appendix.
Strength 2:	The 42 response(s) to this question can be found in the appendix.
Strength 3:	The 37 response(s) to this question can be found in the appendix.

9. Please list three main weaknesses or areas that could be improved of CIFSRF.

Variable Response

Weakness 1:	The 39 response(s) to this question can be found in the appendix.
Weakness 2:	The 35 response(s) to this question can be found in the appendix.
Weakness 3:	The 19 response(s) to this question can be found in the appendix.

10. Phase 1: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall?

The 40 response(s) to this question can be found in the appendix.

11. Phase 2: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall?

The 42 response(s) to this question can be found in the appendix.

12. Please list your top three suggestions or recommendations for improving CIFSRF?

Variable Response

Recommendation 1:	The 39 response(s) to this question can be found in the appendix.
Recommendation 2:	The 30 response(s) to this question can be found in the appendix.
Recommendation 3:	The 20 response(s) to this question can be found in the appendix.

13. Please share additional thoughts or comments about any aspect of CIFSRF.

The 22 response(s) to this question can be found in the appendix.

Appendix

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 1 - Positive:

- 1. Had an opportunity to know the lifestyle and cultural activities of the millet growing regions.
- 2. Community mobilization is important for ownership of the program that leads to sustainability
- 3. National at the intervention site, strong networking
- 4. Chickpea has been introduced to sites where its growth was not considered viable in one district. Additionally, chickpea was introduced as double cropping, i.e., growing chickpea with residual soil moisture after harvest of the main crop. This ensured harvest of two crops in the same season on land that would have been free after harvest of the main crop using slag labor. The practice has increased the income of the farmers and hence double cropping of chickpea is taken as policy issue the regional government.
- 5. Stratégies locales de plantation de bosquet individuel
- 6. The speed with which we were able to get positive results
- 7. The Phase I of the project helped us to understand the science part of the technology development. For instance, during the phase I, 8 students (3 Ph.D & 5 M.Sc) had done their theses. This serves as a strong data base to evolve technology to minimize the post-harvest losses in fruits.
- 8. Development of new partnerships; new research into the social dynamics of livestock farming in South Africa; new research into the micro- and macro-economic impact of livestock diseases in South Africa; skills development in livestock socio-economics in South Africa; gender awareness in research at the ARC.
- 9. Bolivian partners had an opportunity to meet with several First Nations representatives on Vancouver Island to share their experiences with indigenous governance of traditional territories and fisheries.
- 10. During Phase 1, I think one of the main unexpected results of the first phase was the active and ongoing participation of local actors on various strategic activities.
- 11. L'adoption de la technique de microdosage des engrais améliore plus le revenu des femmes (en comparaison aux hommes)
- 12. Institutional strengthening of Bolivian partners; new Bolivian partnerships; adoption of results by government
- 13. The work conducted in phase I was equivalent to over three decades of previous activity IDRC is to be congratulated for taking a chance on this work.
- 14. None to report at this time

- 15. Adaption of our technologies by farmers even before we anticipated. More observations coming in from farmers that helped the scientists rethink.
- 16. Results provided hope that it is possible to use the new technology to produce vaccines, both the current and others in the pipeline
- 17. We identified iron as not being a major contributor anemia
- 18. Not applicable
- 19. women gender decision-making inequality awareness
- 20. Wild vegetables that were highly nutritious but were hitherto uncultivated and on which agronomic information were not available have now been brought into cultivation and agronomic packages have been developed for them.
- 21. Utilization of agricultural waste (Banana stems) to produce banana paper which has multipurpose applications such as eco-friendly fruit wrap to extend the storage life of fruits and also as a gift wrapping
- 22. Family recognition system aquaculture, management of technical innovations and role of women.
- 23. Development of solar powered soil water and temperature sensor, farmers now freely come to the University to discuss issues with other crops not Included in previous project.
- 24. We have identified some antigens, which are prospective candidates for vaccine against more diseases then only the target CBPP.
- 25. Another perspective of looking at food security
- 26. More use of millet products in village and city consumers.

Better awareness of nutritional aspects of millets.

- 7 Combination of social science surveys and GIS based manning pro-
- 27. Combination of social science surveys and GIS based mapping provided novel insights into how demonstration farmers are chosen and what fields they choose for the demonstrations
- 28. no
- 29. note able to judge
- 30. To constitute a strong work team integrated by Colombians and Canadians that work in a transdiciplinary approach and is able to tackle the food security theme in a comprehensive way. This team is a model for Colombia

31. The national government became more aware of the sector's potential contributions to food security and food sovereignity; subsequently, new legislation was passed, creating a new national department for the sector with the equivalent of \$80 million USD committed over 3 years to support continued development of the sector and small-scale farmers. Several of the local partner organizations were able to secure funding from the national government for complementary research.

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 1 - Negative:

- 1. -
- 2. Due to lack of sufficient time for intervention, difficult to show the impact of the project
- 3. mauvaise gestion à l'échelle inter communautaire
- 4. Lack of urgency at the developing country level
- 5. Since nanotechnology is fairly recent, we spent significant amount of time to basic research. For example, to select a suitable smart delivery systems, we adopted both top down (size reduction through ball milling) and bottom up approaches (nano-fibre matrix and inclusion complexes). Among the tests, we ended up with useful products using bottom up approaches and top-down has been completely withdrawn from our research activities.
- 6. Loss of focus as specialist researchers due to diversification of skills into other disciplines.
- 7. An unfavorable element was the political environment. It did not allow, for example, enacting the Fisheries Act previously worked with local actors.
- 8. Inadequate time to address the real issues facing communities
- 9. None to report at this time
- 10. Too much pressure on the researchers from the farmers!
- 11. Fishponds did not add much to plant based HFP
- 12. Not applicable
- 13. slow up-taking of potential outcomes and benefits by small-scale farmers
- 14. The popularization of the vegetables brought so much pressure on the research team in terms of request for improved seeds and production information. It was a lot pressure coping with the needs of the farmers.
- 15. Not applicable

- 16. We participated very timely manner with an investigation in polyculture
- 17. Glut of vegetables I market diem to. Dover production.
- 18. The short project timeline makes it difficult to establish and use a new research partnership: for example synchronizing the all administrative aspects between an African and a Canadian institution can easily take an year, which gives you only 18 months for full-scale collaboration.
- 19. Some times a perception of imposing foriegn way of doing things on Africa
- 20. Sometimes knowledge doesn't transfer through the villages as intended
- 21. no
- 22. note able to judge

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 2 - Positive:

negative) from the work conducted by your project: | Phase 2 - Posi # Response

- 1.
- 2. Not applicable since the project is ongoing
- 3. Social cohesion
- 4. The project has just begun and we have not yet started collecting and analysing data
- 5. Great partnerships between a variety of organisations, and intorduction to new partners and skilss. We are too early in the research to provide results, hence "not able to judge" in the sustainability questions above
- 6. Establishment of Regional Pulse Platform, whereby the stakeholders show high interest in the Innovations. This will ensure sustainability after the project phases out.
- 7. Increased capacity to solve unanticipated problems.
- 8. implication des ONG dans la diffusion des nouvelles technologies
- 9. Engagement of a number of national governments and national private industry
- 10. The Phase II helped us to test the technology at large scale and the Hexanal technology was released for adoption by farmers. Environmental impacts, societal benefits and economic gains from the technology were evaluated and the technology has been popularized through farmers meetings and three village knowledge centers established.

- 11. The project wanted to test the effectiveness of partnership between a NGO (research organization) and a private company for scaling up SAKs (technologies) but this arrangement has also provided an opportunity to judge effectiveness of this partnership for the self sustainability of a NGO. [There is an investment from NGO into the company, so that the revenue generated by marketing SAKs will come back to NGO for further continuation research/testing SAKs and it will reduce dependency of NGO to the donor organizations]
- 12. Additional skills development (e.g. in scaling-up research); gender mainstreaming within ARC; strengthening international Kenyan-South African (ARC)-Canadian government relationships; strengthening of private-sector ties (both national and international).
- 13. Bolivian partners had an opportunity to meet with representatives of several Canadian financial institutions to share their experiences with the design and implementation of small-scale loan programs targeting rural indigenous communities and women.
- 14. We have been able to receive further assistance from CESO-SACO in Canada for the development of several strategies for scaling up our finacial services and innovations.
- 15. During Phase 2 one of the positive elements was precisely the active participation of some public actors in the development process of the sector through multi-stakeholder platforms. We highlight some municipal governments through their productive development secretaries, in addition to the National Health and Food Safety Office (SENASAG)
- 16. Le microdosage de l'engrais sur les légumes traditionnels suscite plus l'adhésion des femmes productrices que les hommes, du fait que les légumes sont incontournables dans la cuisine, gérée déjà par les femmes, en Afrique au sud du Sahara.
- 17. Substantial support from Brazilian partners to help in Bolivia
- 18. Partnerships developed between private sector partners.
- 19. None to report at this time
- 20. Involvement of companies to adopt the technology fro commercial production.
- 21. Equipment installed is the first of its kind for animal health research in Sub Sahara Africa and will be used for purposes far beyond the purpose of the project, to create a centre of excellence for both human and animal health vaccines research under one roof
- 22. Seems to be a big uptake of private enterprise taking up fish hatcheries
- 23. Increased family participation in vegetable production
- 24. Institutional cohesion and strengthening among small scale farmers

- 25. We have succeeded in achieving fertilizer cost-saving through micro-dosing of fertilizer for vegetables production. This approach will also hopefully assist to conserve the soil ecosystem. International cooperation is also fostered through anglophone-francophone relationship.
- 26. Increased awareness of the theory of change paradigm among Indian partners.

 Greater interest in development among university colleagues.
- 27. It is possible to develop two other products from banana stem waste,
 - 1. Hexanal impregnated composite polymer board which can incorporate in fruit packaging to extend the storage life by slow releasing of hexanal.
 - 2. Able to produce a mold / tray to place the fruit in a package in order to minimize the damage to packed fruits during transport.
- 28. Opportunity scaling Phase 1 experience in other areas of aquaculture
- 29. The chance to establish a new Product Development Centre, which can streamline the path from basic research to veterinary pharmaceutical product in Africa.
- 30. Scaling up aiming at populations at the bottom of the economic pyramid
- Adoptation of technology by the manufacturing sector.
 Small and medium food product manufacturers taking on the responsibility of distributing millet products.
- 32. Identified new niche for sustainable and inclusive aquaculture development in Sri Lanka and brought in private sector investment.
- 33. Access to inputs seem to not be a major constraint for vegetable farmer cooperatives
- 34. More insight into the challenges of conducting food security development and research in harsh growing conditions (semi-arid regions)
- 35. Partnering on Vitamin A fortification in Tanzania with crude sunflower oil at the SME level is leading to research & pilot prospects in Colombia with panela (brown sugar) at the SME level
- 36. no
- 37. Field Schools, Plant Clinics and Women Coconut Fairs adopted by smallholder coconut farmers as an approach to raise awareness and increase family income.
 - Agro-ecological disease management strategy disseminated and adopted by smallholder coconut farmers
- 38. good interaction betwenn researchers and populations, farmers, developping agency are established to fight for food security imprivment

Response

39. To develop synergies further than expected, but we are just at the beginning of the project

6. Please provide examples of unintended results (positive and/or negative) from the work conducted by your project: | Phase 2 - Negative:

	Sative.
#	Response
1.	-
2.	Not applicable since the project is ongoing
3.	Market saturation
4.	At present none
5.	manque d'initiatives de soutien de la diffusion à l'échelle nationale
6.	Segregationist of local agency policies
7.	Despite the fact that hexanal technology has been proved beyond doubt effective in various mango production systems across the State of Tamil Nadu, the licensing of the compound is still pending which is a bottleneck in commercialization of the technology.
8.	NA
9.	No comment
10.	We found differences between the private logic that the project is promoting and public efforts that seek to generate awareness in food security, which include subsidies and non-reembursable expenses that distort the private enterprise logic that is key for scaling up.
11.	The political environment affects moderately project activities. There are many changes of positions in some public institutions
12.	Apparent government resistance to innovations (so far)
13.	A lack of understanding by IDRC of the research translation process in the area of our project, especially in areas such as intellectual property and commercialization.
14.	None to report at this time
15.	Too early to comment
16.	There is a lot of pressure to show results in a short time.
17.	Less uptake when women have to pay for HFP
18.	None yet.

Response

- 19. poor development of relationships among PI from participating countries, leading to lack of further collaboration and low trust.
- 20. No negative noticed yet.
- 21. Not applicable
- 22. Some professional jealousy by scientists who have worked on the same disease with less success.
- 23. Over emphasis on uniformity as opposed to creative diversity that would promote a sense of ownership and sustainability
- 24. Markets for indigenous vegetables will be the primary limitation on productivity
- 25. The challenges of implementing short project timelines with variable rain fall, unpredictable growing conditions, leads to difficulty in achieving project goals -- climate change as an important factor in success / failure of projects.
- 26. no
- 27. fund are not enough for extension of activities to all coconut cultivation zone on the littoral
- 28. We are at the begining of the project, so we should wait for the project results

8. Please list three main strengths or positive aspects of CIFSRF. | Strength 1:

- 1. Wide exposure to know the social and conomical conditions of the millet growing countries
- 2. Effective collaboration and partnership
- 3. Public awarness
- 4. The continuous involvement and advice on the way forward is encouraging
- 5. Great support from the IDRC Program Officers in Ottawa and Nairobi
- 6. Strong evaluation of the proposal before approval.
- 7. Level of funding is significant.
- 8. adéquation des thèmes
- 9. Allowed a novel approach to improving small holder farmers welfare

- 10. Scientific Manpower: Indeed, CIFSRF project helped us to build scientific manpower in the cutting-edge nanotechnology. The understanding of the technology has increased exponentially from ground zero to one-thousand during the past four years. In total 24 researchers in the phase I and 18 researchers in phase II have been trained in the fascinating field of nano-science and technology. Altogether, 16 masters and Ph.D. theses had been done. Six of researchers got their faculty positions. One Student (Ms. Sindhiya) got International ICAR fellowship to pursue her Ph.D. at the University of Guelph, Canada. We have got at least 18 publications in various peer-reviewed national and international journals. The Department of Nano Science & Technology, TNAU, Coimbatore, retained its manpower primarily through CIFSRF research funds.
- 11. Partnership arrangement in projects and inputs from IDRC
- 12. Adequate funding for e.g. travel, research and infrastructure development.
- 13. Food security is one of the most pressing challenges facing developing nations. CIFSRF is supporting innovative, tangible, and sustainable improvements to rural food systems that directly benefit poor and vulnerable people.
- 14. The concept of scaling up using private initiatives is an effective and innovative approach for international cooperation.
- 15. Good strategic planning focused on efficient use of resources in developing countries
- 16. Vision claire centrée sur une problématique très pertinente : la sécurité alimentaire
- 17. Substantial programming support and expertise from IDRC
- 18. Willing to take a chance on research that is high risk (and high benefit)
- 19. Too early to in our project to tell
- 20. Being to to develop appropriate collaboration with developing countries
- 21. CIFSRF provides an opportunity for partnerships and resources to advance new research ideas that could have died off without seeing the light of day
- 22. Reporting and accountability have become more streamlined and consistent over time or we have gotten better at it
- 23. Increased women participation in vegetable crop production at the village level.
- 24. good communication and support from central office
- 25. The monitoring and evaluation system is excellent.
- 26. Drew out substantial support from Canadian universities.
- 27. CIFSRF provided the opportunity for developing country researchers to make collaborations with Canadian experts and experts from other countries in respective areas.
- 28. Focus on the small scale and marginalized farmers

- 29. Integrate gender into projects and programs
- 30. people working there
- 31. It is targeted at the poor communities
- 32. Good, contemporary strategy: CIFSRF programs have already integrated socio-economic analysis into vaccine development when others (Horizon 2020) were only starting to include it.
- 33. detailed documentatin
- 34. Positive and sustainable changes are being made at the level of the small scale farmers and the farming community in various villages of the study area.
- 35. Novelty of doing Research into Development rather than purely research or development.
- 36. Support for research -- needs to be maintained and
- 37. gender strategy
- 38. Selection of research themes
- 39. Effective communication and technical guidance
- 40. good interaction between experts, farmers, populations and policy maker
- 41. The trust given to the research team for project implementation
- 42. Providing support to address poverty and food insecurity through both direct and indirect pathways simultaneously.

8. Please list three main strengths or positive aspects of CIFSRF. | Strength 2:

- Highly flexible in carrying out the activities and programme for the promotion of millets
- 2. Addresses all the important component of Food Security including gender and scale up strategy
- 3. Food security networking
- 4. Bringing people from different educational backgrounds and fields of work together
- 5. Well thought through strategies and common sense responses
- 6. Clear strategy to ensure environmental sustainability, gender equity and food security.
- 7. Program officers are hands-off.
- 8. Suivi technique
- 9. Provided continuous support and assistance when needed

- 10. Infrastructure: We have strengthened the infrastructure through CIFSRF funding. We procured a wide array of high-end equipments worth over 400,000 CAD. The Center maintains all equipments in working conditions and each being handled by research staff. Indeed, the sound infrastructure assisted us to achieve desirable nano-based products that are being tested for their commercialization.
- 11. Continuation of good things through different phases
- 12. New skills development (e.g. gender, scale-up, communication).
- 13. The scaling up strategy serves to catalyze the adoption of new technologies and management/governance systems that are directly applicable and/or accessible to poor farmers, thereby supporting a more food secure and sustainable future.
- 14. The focus on small-scale farmers and vulnerable groups for strengthening local Food Security is an effective and innovative approach.
- 15. A systemic approach to work, making linkages between research, knowledge, development programs/projects and practical activities
- 16. Renforcement des partenariats des institutions des pays en développement avec celles de Canada pour bénéficier de leurs experises
- 17. Generally adequately funded
- 18. Formation of multinational partnerships
- 19. Too early to in our project to tell
- 20. Ability to test the innovation in a diverse, large scale setting
- 21. Partnering through CIFSRF provides opportunity for capacity building among scientists in developing countries. Emphasis on gender mainstreaming and small scale farmer approach gives high profile to the relevance of CIFSRF activities
- 22. Flexibility in budget allocation so able to be responsive to changing needs
- 23. Increased financial and food security for poor communities through enhanced monetary gains from vegetable sales.
- 24. Presence of officer in the field
- 25. The system of fund release is also excellent allowing for ensuring value for money in project execution.
- 26. Built up partnerships between Canadian and developing country partners.
- 27. Provide funds to improve the research capabilities, human resource development and institutional infrastructure development
- 28. Gender responsiveness in programming and desire to influence policy in different countries

- 29. Projects must define a clear strategy of environmental sustainability
- 30. International network
- 31. Provision of adequate fund
- 32. Intensifying the global involvement of scientists in Canadian research and thus advertising innovation "Made in Canada". Increasing awareness that Canada is the go-to country for high-tech solutions.
- 33. supportive staff
- 34. Scaling up approach has brought into focus capturing of the information both at the technological level and also at the socio-economic level attributable to the subsistence farmers in different locations of the study area.
- 35. Combining socioeconomic and biophysical work in a meaningful way.
- 36. Encouragement to link Canadian and developing country partners
- 37. strong support
- 38. Multidisciplinary team
- 39. Effective gender strategy
- 40. imroving of gender strategy into different sectors
- 41. The flexibility to evolve proposals presented
- 42. Promoting partnerships and capacity development among both Canadian and developing country researchers, and providing support to each partner equally.

8. Please list three main strengths or positive aspects of CIFSRF. | Strength 3:

- 1. Interaction between the scientist working in the same area of operation is highly productive.
- 2. Develop/Create the right platform for food security and bring all the national partners together to address food security at the national level
- 3. Working across several countries
- 4. Excellent support and backstopping from the program officers.
- 5. Soutien financier
- 6. Provided the required resources

- 7. Capacity Building Programs: The CIFSRF project provided financial support for conducting hands-on-training on "Genomics" (14 researchers) and "Electron Microscopy (2 faculty from Sri Lanka)". Both faculty and research staff were exposed to training in UoG, Canada and visited other countries such as Sri Lanka, Tanzania and Canada for review meetings. As the PI of the Project, it gave immense opportunity to deliver talks at various international forums eg. Feed Africa in Ethiopia, United Nation Open Innovation Forum in Malaysia, International Conference on Family Farms organized by MSSRF, Chennai. This project has provided strengths to get additional research grants from national level funding agencies in India. I am one of the Conveners in ICAR Nanotechnology Platform Projects in the country with a budget of 50 million CAD.
- 8. Targeting poor, smallholders and women
- 9. Partnership development
- 10. CIFSRF's emphasis on capacity building is the foundation for long-term improvements in local food security. Empowering men, women, and communities so that they can lead their own development.
- 11. The consortium logic of the project that sought to bring together different organizations with different perspectives has added value to the main findings of Phase 1 and allowed it to scale up in a more effective way.
- 12. Multidisciplinary work focused on innovation and scaling
- 13. Démarches sensibles au genre et à la durabilité environnementale qui ne peuvent être occultés dans la recherche de solutions durable pour la sécurité alimentaire
- 14. Opportunities for networking
- 15. Too early to in our project to tell
- 16. Taking the innovation to commercial levels and reaching its capacity
- 17. CIFSRF governance structure with program officers gives a PI a sense of needed shielding from those host institution requirements unrelated to the project
- 18. IDRC staff take a real hands-on approach, are there to work through issues in a collegial manner
- 19. Increased interest in vegetable crop production by young people.
- 20. Mentoring programs to enhance capacity of PI and other researchers
- 21. The IDRC Programme Specialists are also very competent especially in the area review of technical reports, field visits and overall project monitoring.
- 22. Provide the opportunity for researchers to work closely with rural communities and also for the benefit of low income families by giving opportunities for scaling up and commercialization the research outcomes.

- 23. Global view and a focus of Sub Saharan Countries
- 24. Ensure the participation of different actors of civil society in public policy proposals
- 25. working with local groups and local governments
- 26. Good monitoring strategy
- 27. Citizen diplomacy: delivering solutions through partnering with local manufacturers, both government and private, makes very strong impression in the African countries, projecting the image of Canada as a friend and partner. "Between profit and friendship, we choose friendship."
- 28. readiness to partner with local reseachers
- 29. Strong collaborative link between the partners in developing countries and Canada.
- 30. Focusing on women issues will provide the most change with limited funding.
- 31. Contribution to policy development and the science of development
- 32. close with Asia situation
- 33. Flexibility and space for being creative
- 34. Effective governance
- 35. training on innovation technologies
- 36. Excellent communication and support received by IDRC
- 37. Combination of research-for-devepment and development outcomes.

9. Please list three main weaknesses or areas that could be improved of CIFSRF. | Weakness 1:

- 1. The timelines are very rigid
- 2. Short duration of CIFSRF project. Strongly recommended to increase the duration of the CIFSRF project to achieve all the research objectives and get the impact of the research project
- 3. Adequate time for implementation
- 4. The interaction has just begun and so it is too early to comment on this
- 5. Short duration of the project for wider impacts.
- 6. Greater leadership and communication
- 7. mauvaise constitution d'équipe nationale
- 8. Time lines are very short based on what needs to be done

- 9. Involvement of NGOs: Despite the fact that NGOs are needed to reach the unreached through outreach programs, their activities are not to our expectations.
- 10. Engagement with developing countries governments
- 11. Misrepresentation/reporting of research outputs by IDRC and other media sources contracted by IDRC (this has resulted in strained relationships with state departments)
- 12. Phase 2 of the project did not contemplate the challenge of changing food consumption habits in order to enable the achievement of the proposed goals. In order for this to take place there should have been a greater investment in time and resources.
- 13. Improve food security and reduce poverty in a country is a major challenge. Perhaps CIFSRF should concentrate efforts in certain sectors or regions to achieve better results in the short and medium term
- 14. Short time frame of projects
- 15. Lack of international business knowledge within IDRC
- 16. Too early to in our project to tell
- 17. Not enough guidance on the partners or potential difficulties
- 18. Level of budget control is strongly pegged on the proposal. The element of innovative research suggests a likely lack of past experience to do an accurate budget in some aspects of the work and therefore calls for flexibility from program officers as long as the expenses remain within the overall budget approved for the whole project period
- 19. Reporting and accountability were onerous and constantly changing at beginning
- 20. Training of project leaders in better communication skills and how to measure impact on the affected communities.
- 21. Micro management of project planning and implemnetation
- 22. I think the monitoring and evaluation system needs to be more strengthened.
- 23. We got conflicting messages about what CIFSRF was looking for in scaling up projects.
- 24. CIFSRF gives more emphasis on socioeconomic benefits and gender issues rather than effective scientific outcome of a successful project
- 25. None
- 26. Systematically support the mainstreaming of gender in projects and implementing institutions
- 27. too bureaucratic
- 28. Students training not emphasized
- 29. Short project duration, especially for newly forming partnerships.

- 30. poor time frames too short deadlines set
- 31. Scaling up projects should be of longer duration from the practical reality perspective.
- 32. Reporting instruments are incredibly painful
- 33. Narrowly focused on commercialization, when many regions of most concern (poverty) are not commercially viable, therefore the need for development interventions
- 34. no
- 35. High expectation on scaling up in a very short time
- 36. M&E time
- 37. increasing funds support
- 38. Connect immediately phase 1 to phase 2, in those successful projects in the view of those who have made project monitoring, not necessarily make a call for phase 2.
- 39. The program materials available online lack a clear and concise definition of guiding concepts for the program such as food security, poverty reduction, scale-up. The thematic and regional workshop events that were supported by the program were very useful in bringing together researchers with diverse perspectives and experiences, an event like this with a focus on 'pathways to food security', or 'links between innovation and poverty reduction' would be very topical. Also, there is a lack of program events that provide opportunities for networking and peer-to-peer learning among representatives of local and national governments, civil society and project beneficiaries. At least some opportunities to showcase exceptional leadership and innovation by leaders of some of these actor groups would be very relevant to program overall.

9. Please list three main weaknesses or areas that could be improved of CIFSRF. | Weakness 2:

- 1. The period of project is less. Atleast it should be for five years.
- 2. Better technical follow up in the cross-cutting themes within Food Security
- 3. Considering appropriate project starting time for projects dealing with planting of rain-fed crops depending onset of rain.
- 4. Increased program officer capacity
- 5. mauvais choix de coordinateur régional
- 6. Expecting developing world partners to have the same work ethic that Canadians do to get things done on time/.

- 7. Financial: During the first phase of the project, financial reporting was done annually which is good and appropriate. In the Phase II, we are asked to provide financial statement every six months which impedes the purchase processes which eventually cause administrative delays.
- 8. More opportunities to young professionals from development countries partners in terms of higher study in Canadian universities and publications should be provides in CIFSRF projects
- 9. Forcing global agendas on developing countries, without prior knowledge (and/or awareness) of local sensitivities.
- 10. Canadian expertise was not so easy to come by in the initial stages of Phase 2 of the project. However, this problem is being dealt with in spite of the initial planning.
- 11. The relationship between Canadian and Bolivian institutions is not always the best due to language difficulties and frequency of communication.
- 12. Not much interaction between different CIFSRF projects
- 13. At times, the relationship between IDRC and our African colleagues was almost adversarial in nature
- 14. Too early to in our project to tell
- 15. Too much pressure by anyone and everyone when there is success
- 16. Lack of clarity on depth or extent of guidance from program officers. PI not knowing if asking for too much. This may contribute to the low degree of trust from program officers as felt by some of the research teams. There have been situations where one has to balance between acting on the advice of the Scientific Advisory Board and that of the Program officer. In one instance, the project defined communication as a research topic to establish reasons why past efforts have not led to adoption while program officers defined communication as using available methods to reach a wider audience
- 17. Convincing partner of the need for rigorous and timely data collection which could be encouraged more by CIFSRF
- 18. Need for better emphasis on interdisciplinary student training.
- 19. Increase the networking capacity of the whole program (e.g., exchange with other projects at different stages of development and implementation)
- 20. Phased fund release on CIFSRF projects should be tied to satisfactory on-the-spot evaluation of field work. Therefore, IDRC will need more staff or consultants to assist in evaluating projects before fund is released.
- 21. It would have been better to have more slightly smaller projects in the scaling up phase so that more projects could have continued good work started in the previous phase.

- 22. Use the same mechanism to monitor of assess the impact of a project.
 - Ex- if a project is mainly related to human nutrition or any staple food of a country it has a direct impact on the society.
- 23. None
- 24. inflexible when it comes to budgets, reports, etc.
- 25. Non assistance with equipment purchase
- 26. Travel limitations can make execution of international projects difficult.
- 27. taking too long in approval processes our project has taken 1 and half years to be approved and kick off
- 28. Education to accomplish higher degrees of the youngsters from the developed country should be encouraged.
- 29. Limited attention to traditional knowledge systems -- this should also be mainstreamed in the way that gender is currently done
- 30. no
- 31. Lack of provision for continuity to many of the potential research results in phase I
- 32. Scaling-up at national and multinational level for private sector
- 33. duration of project is so short
- 34. The time to implement projects in phase 2 is not enough so, I recomend to increase the period for implementing projects in phase 2 at least during 3.5 years.
- 35. The program would benefit from greater visibility online through a simple google search, it is difficult to even find a webpage associated with CIFSRF that explains what the program does and why Canadians should feel good about it.

9. Please list three main weaknesses or areas that could be improved of CIFSRF. | Weakness 3:

- 1.
- 2. projets sans production scientifique
- 3. Reporting: Technical Reports are submitted once in six months and being evaluated by a team in IDRC. They take more time for evaluation which delays the release of funds and research activities
- 4. The projects are of very short duration. It should be more practical and match with anticipated objective

- 5. Given the complexity of the milestones established in the project and the amount of actors involved, further monitoring visits by CIFSRF would have helped keep the project on better track and accomplish our goals in a more effective way.
- 6. Not well designed for Canadian NGO participation in terms of cost structures
- 7. Too early to in our project to tell
- 8. Too much pressure on things that may not be relevant to a particular project
- 9. Time commitment for Canadian academics who don't get paid to work on projects and get little relief from other duties from universities. If a PI says they are 0.4 they are not relieved of 2 days a week of regular duties.
- 10. More frequent interactions with IDRC project officer(s) to ensure adequate progress is made on all project deliverables.
- 11. None
- 12. Lack of funding for student training programs. Training funding is available and encouraged by CIFSRF, but project timeline is insufficient a post-graduate training.
- 13. lack of clear articulation of expectations
- 14. ?
- 15. no
- 16. Less than adequate capacity building support to project holders
- 17. extension of eligibility of the funds
- 18. The funds in phase 2 are small according to the expectations from CIFSRF. Implementation costs vary according to the country where the project is implemented and this can generate large differences, for example between Africa and Latin America
- 19. The duration of projects is too short to achieve adequate development impact. The time between funding cycles is too long, the expectation of time and human resource investment in proposal development phase is too high, the combination of these makes it inefficient. Also, it is very difficult for smaller not-for-profit organizations to be engaged in the process. We had 4 staff members from two organizations volunteering full-time for 8 months to complete final reporting for our Phase I project and revisions to our Phase II project before it was finally approved.

10. Phase 1: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall? |

Response

1. 8.5

2.	9
3.	7
4.	5
5.	5.5
6.	9.5
7.	4
8.	10
9.	10
10.	5
11.	8.5
12.	10
13.	4
14.	8
15.	9
16.	8
17.	7
18.	5
19.	8.5
20.	9
21.	8.5
22.	8.5
23.	10
24.	5
25.	9.5
26.	
27.	
28.	
29.	
30.	9.5

31.	2
32.	8.5
33.	8
34.	10
35.	5.5
36.	9
37.	8
38.	5
39.	10
40.	9

11. Phase 2: On a scale of 1-10 (with 10 being the highest), how satisfied are you with CIFSRF overall? |

#	Response
1.	9
2.	7
3.	7
4.	8.5
5.	8
6.	4
7.	5.5
8.	10
9.	10
10.	9
11.	
12.	10
13.	7
14.	8
15.	9
16.	8.5

18. 6 19. 7.5 20. 8.5 21. 9.5 22. 10 23. 8.5 24. 10 25. 8 26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5 42. 9	17.	8
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21. 9.5 22. 10 23. 8.5 24. 10 25. 8 26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	19.	7.5
22. 10 23. 8.5 24. 10 25. 8 26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	20.	8.5
23. 8.5 24. 10 25. 8 26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	21.	9.5
24. 10 25. 8 26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	22.	10
25. 8 26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5	23.	8.5
26. 9 27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	24.	10
27. 6 28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	25.	8
28. 8 29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	26.	9
29. 7 30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	27.	6
30. 8.5 31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5	28.	8
31. 9.5 32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	29.	7
32. 5.5 33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	30.	8.5
33. 8.5 34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	31.	9.5
34. 8.5 35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	32.	5.5
35. 10 36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	33.	8.5
36. 8 37. 1 38. 6 39. 8 40. 7.5 41. 8.5	34.	8.5
37. 1 38. 6 39. 8 40. 7.5 41. 8.5	35.	10
38. 6 39. 8 40. 7.5 41. 8.5	36.	8
39. 8 40. 7.5 41. 8.5	37.	1
40. 7.5 41. 8.5	38.	6
41. 8.5	39.	8
	40.	7.5
42. 9	41.	8.5
	42.	9

12. Please list your top three suggestions or recommendations for improving CIFSRF? | Recommendation 1:

Response

- 1. The scientists involved in the shortlisted proposals may be invited for a workshop to improve the final programme.
- 2. Increase the duration of the research project and to make it at least 4 years
- 3. Better technical follow up and suppport
- 4. Unable to answer this at present
- 5. Increase the duration of projects that with field research for wider impacts and greater adoption.
- 6. Hiring senior staff with backgrounds and experience in scaling and working in the private sector
- 7. implication transparente dans le choix du coordinateur régional
- 8. It is working very well. Don't tinker.
- 9. The CIFSRF project helped us to equip human resource, infrastructure, capacity building besides commercialization of few nano-based products. The efforts undertaken should benefit large number of countries and people. The team may be given chance to lead another project after the expiry of phase II in 2018.
- 10. Work closely with development countries governments for the policy influence to support scaling up of innovations
- 11. Better two-way communication/discussion for ensuring accurate project reporting
- 12. Once the project is pre-approved, we recommend doing a more thorough fine-tuning of the project milestones and its challenges, in order to better prioritize resource allocation.
- 13. Improve food security and reduce poverty in a country is a major challenge. Perhaps CIFSRF should concentrate efforts in certain sectors or regions to achieve better results in the short and medium term
- 14. Identification de jeunes leaders (chercheurs/développeurs) à coacher par le FCRSAI pour des actions soutenues, continues et durables pour la sécurité alimentaire. Ceux-ci pourront etre identifes dans les equipes des divers projet beneficiaire du FCRSAI et recevront des renforcements de capacités dans les domaines clés (gouvernance, innovations, etc) et pourront coacher à leur tour d'autres jeunes pour une action durable pour la sécurité alimentaire. Cette approche fonctionnera en synergie avec l'approche actuelle du FCRSAI mais facilitera la mise à echelle meme de l'innovaton que represente le FCRSAI en lui-même.
- 15. Projects of longer duration
- 16. Too early to in our project to tell

- 17. Some more guidance on the number and capacity of partners based on past expereince
- 18. Explore ways of balancing involvement of program officers in implementation of project decisions. Currently not clear what is good enough
- 19. More cross-project meetings. An annual meeting of Canadian investigators alone to discuss common issues. i.e. working with in-country partners understanding their motivations, which are often very different than CDN academics
- 20. Increased financial support to provide additional funding that may be required to mitigate the negative effects of unforeseen circumstances during project execution.
- 21. Longer periods for implementation of projects and support for dissemination of outcomes as the project develops
- 22. Phased fund release on CIFSRF projects should be tied to satisfactory on-the-spot evaluation of field work. Therefore, IDRC will need more staff or consultants to assist in evaluating projects before fund is released.
- 23. There was too strong of a focus on private sector production of technologies in the scaling up phase.
- 24. The project impact assessment or monitoring mechanism should be project specific but should not be a common one for all the CIFSRF projects as the social impact of some project will be shown later in some projects (not at the time the project completed)
- 25. Consolidate gains from phases of the projects
- 26. Train start of projects on strategic issues, gender, environment and governance
- 27. less red tape, more flexible, focus on the research goals
- 28. Establishment of new research and development partnerships requires time. It may be appropriate to devise a short period (~6 months or shorter) for the future collaborators to draft and sign the necessary MOU, Contracts, Material Transfer Agreements etc. However this period should only be sufficient for these activities in order to stimulate the participating institutions to expedite contracting.
- 29. Set appropriate time lines
- 30. Ways for Canadians to be involved at the practical level in capacity building which could be sustainable.
- 31. Stronger market focus for food security solutions. Sometimes food security benefits follow from market-driven innovations provided that they are done with focus on inclusive and sustainable goals.
- 32. 3 year project durations make it difficult to study more long term changes or evaluate the successes of scaling up.

- 33. See note on weaknesses above
- 34. no
- 35. Create provision for giving continuity to potential research results in Phase I, to make the already made investment more productive
- 36. Better planning and coordination of time for M&E
- 37. improving fund level
- 38. To extend the time for implementation of projects for phase 2
- 39. Lengthen the duration of projects to up to 5 years.

12. Please list your top three suggestions or recommendations for improving CIFSRF? | Recommendation 2:

- 1. Duration of the meetings may be shortened.
- 2. Organizing workshop is an excellent initiative like scale up and gender workshop. If possible, suggest to organize more workshop on other important areas like sustainability, documentation, developing policy brief etc
- 3. Adjust time for scale up projects (over 5 years at least)
- 4. The approval of proposals and release of fund should take into account the planting time for projects dealing with field crops using rain.
- 5. Much better communications and dissemination strategy
- 6. la supervision technique de l'équipe internationale
- 7. Financial Report : Reporting may be made as annual like in Phase I which minimizes administrative delays.
- 8. Increase support (expertise) from the side of IDRC on special matters relevant to the project like scaling up, policy influence, trade/marketing etc.
- 9. Better planning for continuity between project phases.
- 10. Each CIFSRF project should include a Canadian partnership strategy to strengthen linkages between local and Canadian organizations.
- 11. Opportunity to address more of the underlying aspects of food insecurity, not only targeted single solutions
- 12. Too early to in our project to tell
- 13. Appropriate starting time so we don't have to sacrifice our holidays. Seriously!

- 14. Need for some introductory lessons to finance personnel on reporting expected from institutions hosting the projects
- 15. Monetize the value of the CDN university in kind support and recognize it. If CIFSRF had to pay for academics time, like most American granting agencies do, these projects would cost millions more. Country partners are paid to work on projects.
- 16. Greater emphasis on marketing components of projects to ensure adequate economic returns to farmers.
- 17. More independence and less pressure from central to decrease a sense of being constantly observed or under the lens
- 18. Monitoring and evaluation of projects should be more strengthened.
- 19. Train start of projects on administrative issues and schedule reports
- 20. get more buy in from local governments. if they have skin in the game they would support the research more.
- 21. Travel limitations: in an international project a lot depends on the personal involvement of scientists and students across national borders. travel is inherent to such projects and should not be limited by anything but the eligible expenses guidelines. It may be even beneficial to require some minimal number of site visits by all teams.
- 22. shorten the approval processes
- 23. Ways to have strong education and training component to support research agenda.
- 24. Translating research to action needs strengthening. Researchers need to be teamed with private sector partners in a more direct way.
- 25. no
- 26. Creating space for further continuation of Phase Ii project, based on the results, to continue the momentum generated and to support scaling up to reach large number of end users
- 27. Better planning and coordination for scaling-up at national and multinational level for private sector
- 28. inceasing duration of project
- 29. The call for projects for phase 2 to do more simple and understandable
- 30. Reduce the amount of time between funding cycles

12. Please list your top three suggestions or recommendations for improving CIFSRF? | Recommendation 3:

Response

- 1. A provision may be included for the actual stake holders to visit other countries and see the improved operations pertaining to the project.
- 2. obligation de résultats scientifiques, techniques pour les développeurs et de résultats pour les décideurs
- 3. The University KVKs (Krishi Vigyan Kendras) may be involved in social research instead of NGOs
- 4. Think little bit more about about development countries professionals and students in terms of capacity building
- 5. Utilise improved M&E tools (e.g. newer reporting templates/forms/online resources)
- 6. Given the complexity of the milestones established in the project and the amount of actors involved, further monitoring visits by CIFSRF could help keep the project on better track and accomplish our goals in a more effective way.
- 7. Greater opportunities for learning between projects
- 8. Too early to in our project to tell
- 9. Reduce the frequency of reporting so we can do the work
- 10. The positive benefits of agricultural interventions on nutrition and health take far longer than traditional nutrition interventions such as fortification or cash transfers. In many cases possibly generational and certainly longer than most i.e stunting. I'm not sure that the intermediaries such as improved HFIAS. dietary diversity are really surrogates of improved nutrition. There needs to be more work put into whether these intermediaries are valid in predicting improved outcome.
- 11. Diversify project funding to include at least one multinational project that focuses on value-added utilization. The current emphasis on production agriculture is great but CIFSRF should consider the possibility of a glut of agric products from very successful projects. Funding of strictly value-added utilization projects should be considered an important part of food security, especially in developing countries.
- 12. Encourage and facilitation of better communication and work practices among investigators, building capacity on information technology among recipient countries.
 - Decrease the sense of paternalism experienced sometime by recipient countries.
- 13. Training of students and scientists from the country-collaborator may merit a separate funding. It may be helpful to have a training fund where foreign students or scientists may apply for scholarships. These may also be used as seed money when one or two year stipend and small research funding provides a proof of concept for future grant application.

- 14. Allow Universality of purpose but diversity in approach for greater creativity for scaling up
- 15. Strong collaborative link between industry and University at all locations.
- 16. no
- 17. Continual capacity building support on scaling up and scaling up research
- 18. extension of fund support to individual project
- 19. Give sustainability to those results from phase 1 that need more time and can not be scale-up like an innovation but are essential to develop knowledge in medium term.
- 20. Increase visibility of the program in Canada and online.

13. Please share additional thoughts or comments about any aspect of CIFSRF. |

- 1.
- 2. Current CIFSRF initiatives are great.
 - Linking Agriculture sector with nutrition and how we can make more nutrition-sensitive agriculture is an important area for Food Security and Nutrition Intervention. In future, it would be great if CIFSRF will give more focus on research to strengthening the sensitivity between Agriculture and nutrition would be great. Now this is an important issue globally for achieving food security and nutrition.
- 3. The initial interactions have been very promising and the scaling up work shop has provided many insights.
- 4. les projets FCRSAI suscitent de l'engouement dans les communautés locales mais la fin prématurée ou arrêt brusque du projet laisse un mauvais souvenir de Canada dans le milieu local. Les arrêts de projet pour faute de bonne coordination régionale, arrêt pour insécurité dans le pays sont des critères à revoir.
- 5. Great program
- 6. We are extremely pleased to work with IDRC. The Phase I and II projects are considered livelihood financial support for the genuine cause of nanotechnology research in the country and provided opportunity evolve nano-based technology to minimize the post-harvest losses and maximize the availability of fruits thereby ensure nutritional security
- 7. Overall, I like the way CIFSRF is designed. I feel comfortable to work in CIFSRF project. The best part I have found in CIFSRF is its flexibility to revise the activities, budget and timeline when there is proper rationale. This has increased the chance of higher impact.

- 8. In general, very well supported/managed. Good communication channels with project coordinator/s, and flexibility within scope of project. Suggest IDRC offers a project management workshop to PIs at outset of new projects.
- 9. Je conclus en disant que le FCRSAI est un excellent programme qui donne et donnera des succès à grande échelle en Afrique et dans le monde. C'est un model qui doit faire cas d'école en matière d'approche innovante de recherche de solution globale pour le développement humain au niveau mondial.
- 10. Way too much reporting to satisfy the needs. This cuts into our actual working time. Proper guidance on who we can hire and who we cannot. Please continue to encourage the presubmission workshop between potential partners as it had a huge bearing in phase 1. Please reduce our drudgery on this mundane reporting- Pls spend typically 4 months in the year to assemble and report. Improve the financial reporting mechanism-too much to do once in 6 months.
- 11. There is a lot of emphasis on what countries gain from Canadian expertise. The PIs etc. have gained insight into the realities of working in LIC. Also, we shouldn't underplay the value of training given to graduate students. There is a dearth of academics working particularly in nutrition and development in Canada. I think CIFSRF has allowed the training of the next generation of researchers, from early in their careers leading to considerable capacity building
- 12. Help Canadian PI's to better understand the role in the project, as well to set realistic expectations, when working in developing countries.
- 13. As far as I am concerned, CIFSRF is doing great. A little more effort in the area of monitoring and evaluation will make a greater impact.
- 14. Our small unit geared up to implement two big CIFSRF projects for just 3.5 years and then received no support for any follow up activities. This seems like a big waste of effort.
- 15. CIFSRF has given us the opportunity to develop novel products which will be highly accepted by the industry and thereby improve the living standards of poor people who work in those industries and farms. The products developed at the phase I in the laboratory or trial experiment basis were upgraded to commercial scale with the assistance in the Phase II.
 - We are highly satisfied with the assistance / clarifications given by the CIFSRF staff in financial report and technical preparation.
- 16. Complex international projects will benefit from a budget which mitigates risk better. It can be done by a separate category, or by increasing the flexibility of transferring money and effort between categories.
- 17. I would like to thank the institution for taking the bold step to support the sub-saharan Africa in issues of food security. I would like to see more participation of local potential service providers in CIFSRF supported projects for example M and E consultants for empowerement of local experts.

- 18. CIFSRF has done a marvellous job of changing the IDRC direction in a very positive and exciting fashion. I know it was a big challenge at the time when I look back; having done several CIDA projects and also being involved in two phase I projects and now as a PI of one of the phase 2 projects.
- 19. consider about exchange rate from Canada currency to local currency time by time
- 20. Engaging with CIFSRF was an enriching experience for all the partners and resulted in capacity building of the research team and Canadian students. The partnership was extended beyond the project period. I was amazed about the progress made by CIFSRF projects across the continents on relevant food security themes. There is lot of scope for learning for development community and development assistance community.
- 21. beside funding project CIFSRF must organize public conefence or communication to more inform the population on the opportunities offered by him
- 22. I am very happy to share with CIFSRF that the strong incidence that our projects have had in Colombia in different aspects, from education until its impact on the political issues, and the maturity that researchers have achieved and strengthening the capacities of Colombian and Canadian teams, we are different from CIFSRF.