Independent Science and Partnership Council

CGIAR

14 October 2015

ISPC Commentary on CGIAR Portfolio – CRP-II

Executive Summary

The ISPC (also drawing on reviews by external experts and referring to reviews of Phase 1 and Extension proposals) reviewed 13 CGIAR Research Program (CRP) pre-proposals and nine Expressions of Interest (EoIs) for four Cross-cutting Platforms (CCPs) between 17 August and 28 September.

Eight pre-proposals received overall ratings of "Satisfactory with adjustments needed" (B), four were considered to have "Major concerns" (C) and one was considered not to have met the basic criteria for a CRP and therefore did not receive a rating.

Commentaries on each pre-proposal and commentaries on each CCP were submitted by the ISPC Chair to the Fund Office (FO) on 28 September.

The requested budget for 2017 for the portfolio as a whole was USD 1.345 billion compared to USD 1.047 billion requested for 2016 in the Extension proposals. An increase of 28%.

Individual Flagships were also rated and of the 69 Flagship projects (from the 12 pre-proposals which were rated), 16 were rated A (Satisfactory), 34 were rated B, 16 were rated C and 3 were rated D (Unsatisfactory).

There was strong alignment with the SRF Results Framework, particularly with respect to addressing the grand challenges, their focus on the eight CGIAR research priorities and the alignment with SLOs, Cross-cutting themes, IDOs and sub-IDOs. Every sub-IDO is being addressed by at least one CRP.

There was significant evidence of lessons learnt from within CRPs (during Phase 1), from the Evaluation reports and from earlier ISPC commentaries, although this was better in some CRPs than others.

Progress was observed in some CRPs regarding Theories of Change and Impact Pathways but others still have some way to go.

Background

In May 2015, the *CGIAR Strategy and Results Framework 2016-2030* was approved. It was an update and major revision of the first *CGIAR Strategy and Results Framework*, which covered the period 2009-2015.

In a parallel exercise, the DGs and Science Leaders had been (2014/15) developing the concept of a 'designed' portfolio of CRPs (8 Agri-food system CRPs plus 4 Global Integrating Programs), which was presented to a meeting of Centers, Consortium Office, Consortium Board and ISPC in mid-May 2015.

On 15 June 2015, the CGIAR Consortium Office released the *CGIAR Research Programs' Second Call: Guidance for Pre-Proposals,* which incorporated this concept, with the addition of a Genebanks ++ CRP as an additional GIP. This Call was to put the new CGIAR Strategy and Results Framework into practice, and was therefore subtitled *Companion to the 2016-2030 CGIAR Strategy and Results Framework*.

The Call invited pre-proposals for a second phase of 13 CGIAR Research Programs (CRPs), and Expressions of Interest (EOIs) for 4 Cross-cutting Coordination Platforms (CCPs), to be submitted by 17 August 2015.

Methodology

These were reviewed by the Independent Science and Partnership Council (ISPC), drawing on additional reviews commissioned from external experts and making reference to commentaries on Phase 1 CRP proposals, Extension proposals and, where available, external evaluations of Phase 1 CRPs.

The ISPC was asked to place each CRP pre-proposal in one of four categories: A (Satisfactory), B (Satisfactory with adjustment), C (Major concerns), and D (Unsatisfactory). CRPs and EOIs in categories A and B will be invited to submit full proposals; those in category C will be invited to resubmit a revised pre-proposal; and those in category D will not proceed to the full proposal stage. The individual Flagship Projects (FPs) that comprise each CRP were also rated from A to D.

The ISPC also agreed to rate 3 key criteria at CRP level: Overall analysis as an integral part of the portfolio; Theory of Change and impact pathways, and Governance and management. The intent here was to try to provide additional guidance on the parts of the CRP that needed 'adjustment' and to differentiate between the high number of B-rated CRPs. No CRPs were awarded 'As' overall

since they either had a Flagship rating a C/D or, in the case of Rice and Maize, 'Bs' for the criteria relating to overall analysis.

The ISPC was also asked to place all the EOIs for the four CCPs in categories A to D and, in addition, to consider whether they would be most effective as a Flagship Project within a CRP, or as a stand-alone CCP.

The Objectives of ISPC review of the pre-proposals were:

- The improvement of the CRP and CCP full proposals.
- A more effective and coherent research portfolio.
- More efficient use of resources.
- Greater impact, and hence a greater contribution to the SDGs.
- More donor confidence in, and support for, the CGIAR .

Changes from Phase 1 to Phase 2 Portfolio

Key features of the Phase 2 Portfolio (as laid out in the 2nd Call document) include:

- A designed Portfolio of CRPs that is greater than the sum of its parts;
- Greater focus on excellence and scientific leadership;
- Outcome-focussed contributing to the Sustainable Development Goals (SDGs);
- A focus on innovation in agri-food systems CRPs;
- Cross-cutting global integrating CRPs;
- Cross-cutting Coordination Platforms (Gender, Capacity Development, Big Data and Genetic Resources Policy);
- Investment in Big Data and ICT;
- Collaboration in defined geographies through Site Integration Plans;
- Greater value for money.

With regard to the Phase 2 Flagship Projects:

- The number of FPs has been reduced from 87 (or equivalent) in Phase 1 to 69 in Phase 2;
- 35 Phase 1 FPs appear to have been 'dropped', although much of their content appears to have been incorporated into others FPs.
- 22 FPs appear to be 'new', of which three focus on foresight, prioritization and/or impact assessment, and five focus on up-scaling.

Overall quality of the Pre-Proposals

Of the 13 CRP pre-proposals submitted, eight were rated B (requiring improvements to be included in the full proposals), four were rated C (requiring major changes and resubmission of pre-proposals), and one (the Genebanks ++ CRP) was not rated since it did not conform to the CRP criteria.

Of the 69 Flagship Projects comprising the 12 CRPs which were rated, 16 were rated an A (satisfactory), 34 were rated a B (requiring improvements to be included in the full proposals), 16 were rated a C (requiring major changes to be included in the full proposals), and three were rated a D (rejected in this form, but some elements can be retained in other FPs).

Table 1 ISPC ratings on CRPs, key criteria and Flagships

	A4NH	CCAFS	PIM	WLE	DCLAS	Fish	FTA	Livestock	Maize	Rice	RTB	Wheat
CRP	**B**	**B**	**B**	**C**	**C**	**C**	**B**	**C**	**B**	**B**	**B**	**B**
Overall analysis as an integral part of the CRP portfolio	**A**	**A**	**B**	**B**	**B**	**B**	**A**	**B**	**B**	**B**	**A**	**B**
Theory of Change and Impact Pathway	**A**	**A**	**B**	**C**	**B**	**B**	**B**	**C**	**A**	**A**	**A**	**A**
Governance and Management	**A**	**A**	**A**	**C**	**C**	**C**	**B**	**C**	**A**	**B**	**A**	**A**
FP1	B	A	B	B	A	B	B	B	B	B	A	B
FP2	A	B	C	B	B	B	A	B	A	A	A	B
FP3	B	B	C	B	C	C	A	C	A	B	A	B
FP4	B	C	B	B	D	C	C	C	B	A	A	B
FP5	C		A	D	B		B	C	B	B	C	C
FP6	C		A	C	B		A	D	B	B	C	
FP7					B		B					

The number of As (4) and Bs (8) for the key criterion 'Overall analysis as an integral part of the CRP portfolio' (which included sub-criteria such as 'Strategic relevance', 'Rigor and credibility of the scientific arguments', 'Coherence', 'the whole greater than the sum of the Flagships' and 'Inter-CRP synergies') suggests a set of programs which have made significant progress towards alignment with the SRF and with substantial evidence of the increased interaction which has taken place amongst Centers and between CRPs.

Six CRPs were rated A for 'ToC and Impact Pathways' but 2 were rated C, contributing to an overall rating of C. This criterion also includes a sub-criterion of 'alignment with the SRF', and the high number of As can be interpreted as reflecting an increasing understanding of how the whole portfolio can contribute more than just the sum of the CRPs. The 2 CRPs with Cs for this category are essential parts of the portfolio but need more time to think through how they can best contribute to the SLOs.

Six CRPs were also rated A for the criterion labelled 'Governance and management' which includes sub-criteria on the qualities of the leadership team and partnership strategy, together with overall governance. Four CRPs, however, were rated C for this criterion and these were the same 4 which were rated Cs overall. The ISPC has observed the evolution of all CRPs from the beginning and has observed the importance both of strong scientific leadership and a governance structure that empowers the CRP leader effectively.

Nine Expressions of Interest were submitted for the four CCPs, of which two were rated A, one was rated C, and the remaining six were rated D. A tenth unsolicited EoI was not considered.

Table 2 ISPC ratings on individual Expressions of Interest

Gender	**D***
System-wide Genetic Resources Policy Platform	**C**
Capacity Development - ILRI	**D***
Capacity Development - IITA	**D**

Big Data & ICT- CIAT	**A**
Big Data & ICT- ICARDA	**D**
Big Data & ICT-ICRISAT	**D**
Big Data & ICT- IFPRI	**A**
Big Data & ICT ILRI_ICRAF	**D**

*Note these ratings relate to our perception of the lack of added value rather than the quality of the EoIs

In reviewing the CCPs the ISPC also reflected on feedback from the Task Force on strengthening the ISPC which had commented on the complexity of the current CGIAR structure (including the number of distinct entities) and the difficulties which the CGIAR appears to have in closing down entities which have completed their task. For this reason, the ISPC were not convinced that the case had been made for either the Gender platform or a new Capacity Development platform. It also considered that the Big Data platform should have a finite life-span equivalent to the duration of this phase of CRPs.

Specific scientific issues

Systems research approach

The importance of systems research is recognized in the Phase 2 Portfolio. Although the three Phase 1 systems CRPs will be discontinued (Aquatic Agricultural Systems, Dryland Systems and Humidtropics), most of their work has been adsorbed into other CRPs. More importantly, the Phase 1 commodity CRPs show some evidence of a stronger whole system perspective, into which the commodity improvement work is appropriately contextualized and focused. This is a significant and positive evolution of the CGIAR research portfolio.

Some of the eight new AFS CRPs (Rice, Wheat, Maize, RTB, Drylands Cereals and Legumes, Livestock, Fish, FTA) show some evidence of a new emphasis on systems approaches. However, in many cases, the adoption of a systems approach is superficial. Whilst it is accepted that CRPs had little time to make major changes in their pre-proposals, the full proposals should be far more convincing about systems approaches. A fuller definition of agri-food system research in the template for the full proposals would be helpful.

There also needs to be greater clarity as to whether the Drylands Cereals and Legumes CRP is defined as an ecosystem based program that targets the major

dryland cereals and legumes within it or a commodity-based program that targets the dryland areas.

Integrated research portfolio

The need for greater integration between the CRPs is recognized in the Phase 2 Portfolio by the creation of four globally integrating CRPs. These deal with issues that are relevant across the Portfolio, and which require close collaboration between many other CRPs, namely: Water, Land and Ecosystems; Climate Change; Nutrition and Health; and Policies, Institutions and Markets.

The ISPC recognizes that there was insufficient time between the agreement on the design of the portfolio and the pre-proposal submission date for the full value of the integrating concept to be developed and it would caution that it is unrealistic in the short-term for the 'new' integrating programs to link with all 8 AFS CRPs from the start. CCAFS has had time to develop its 'integrating' strategy and perhaps lessons could be learnt from that experience.

Gender and youth

The Guidance for Pre-Proposals emphasized the need for research to address gender inequalities and required each CRP to have a gender strategy. Pre-proposals were also required to mainstream youth and the private sector. Although gender is mentioned by most Flagships, and there are specific gender Flagships in some CRPs, cross-cutting gender platforms within some other CRPs, and a Cross-Cutting Platform across all CRPs, gender has not been fully integrated into the scientific priorities and the theories of change for CRPs. More strategic thinking is needed about the ways in which gender might effectively influence research questions. CRPs need to recognize that gender-influenced strategies can achieve impact on SLOs through many means other than targeting 'women farmers' or 'women' as a separate category of beneficiaries/disadvantaged population.

The ISPC recognizes that the CGIAR has been working on gender strategies for some time, while thinking about youth and the private sector is at an early stage. It welcomes the System-wide initiatives to stimulate thinking on youth and the private sector and would encourage greater clarity on where there are feasible opportunities for agriculture to help with issues around youth.

Comparative and collaborative advantage of the CGIAR

During the evolution of the SRF, donors talked about the comparative advantage of the CGIAR working with its partners (which is effectively collaborative advantage) as addressing at least 2 SLOs simultaneously (if not all 3), as part of their niche in delivering IPGs. In other words not just considering how research can contribute to reducing poverty, but how to reduce poverty whilst also improving nutrition and/or enhancing the environment. There is evidence in the pre-proposals that the GI CRPs are one way of realising this potential, but thinking along these lines has (understandably) some way to go.

Thinking on partnership strategies also needs considerable development or refinement. Partners are changing, becoming stronger and moving into non-traditional areas. The ISPC was not convinced that CRPs had always thought through how their own comparative advantage needed to adapt to such changes. Perhaps a more specific question should be included in the full template to encourage CRP proponents to describe how they perceive their own comparative advantage relative to other providers of research outputs and delivery partners. This should be complemented by a justification of a small number of core partners.

Issues around accelerating progress towards the SLOs

There was a noticeable increase in the number of Flagships focussing on activities which are critical to enhancing the likelihood of and speeding up progress from research outputs to delivery outcomes. Key activities include foresight and prioritization at the start of research and scaling-out/impact assessment after the research is completed.

While welcoming this stronger focus on enhancing the likelihood that CGIAR research will lead to measurable impact at the IDO/SLO level, the ISPC noted the following points:

- There are numerous activities on foresight and prioritization at a range of levels within the CGIAR System without a common framework to capture synergies and avoid duplication. The ISPC Task Force suggested that the ISPC could play a part in convening, coordinating and strengthening foresight and prioritization, by identifying best practices, and establishing a system level quality control function. This would help to avoid biased strategic thinking, over-influence by history, expertise, or vested interests, since some Steering Committees may include conflicts of interest, or have too narrow a view.

- A clear deficiency in the current system structure is the lack of any well-defined system for monitoring the adoption and uptake of technologies developed within the CGIAR and its partners. At present, responsibility for this function resides in CRPs and Centers, none of which has demonstrated a capacity or willingness to undertake this on a regular basis. What is needed is a System-wide approach to collecting data on the adoption and diffusion of new technologies[1]. Ideally, this will be linked to social and economic statistics, so that adoption can eventually be linked to impact. One approach would be to merge the data collection with large-scale household surveys such as the Living Standards Measurement Surveys or other nationally representative panel surveys of households. Another possibility would be to link the data collection with agricultural censuses, which might provide a good long-term solution. This could be achieved, for instance, through an appropriate partnership with FAO. Perhaps this should be included under the Big Data CCP.
- Impact assessment, particularly *ex-post*, is still generally under-budgeted across the CGIAR System, and seldom referred to in the CRP pre-proposals. The ISPC is concerned that there is still too much reliance on the work undertaken by SPIA. As the Portfolio as a whole becomes more integrated it would be good to see a strategy for how this could be co-ordinated across the System at the time of submission of full proposals.

Contributions to the SRF

As a portfolio, the CRP pre-proposals show that a genuine and considerable effort has been made to respond to the SRF 2016-2030. There are plans to address all ten Societal Grand Challenges; a start has been made on implementing the four cross-cutting themes; the eight research priorities provide the core or major components of one or more CRPs; and site integration plans are under development. Systems approaches have not disappeared with the dissolution of the three 'systems' programs, but more guidance needs to be given on what is expected of the AFS CRPs in this respect.

There is certainly more evidence that research outputs will be scaled-up and linked to value chains and entrepreneurship, although the further link to the provision of jobs and income for the youth is still work in progress. Delivery partnerships are numerous, including with the private sector, but these are not

[1] While one Cluster within a FP of PIM is cognizant of the need for such a function and will attempt to address this more selectively, that effort will fall short of providing a system level service.

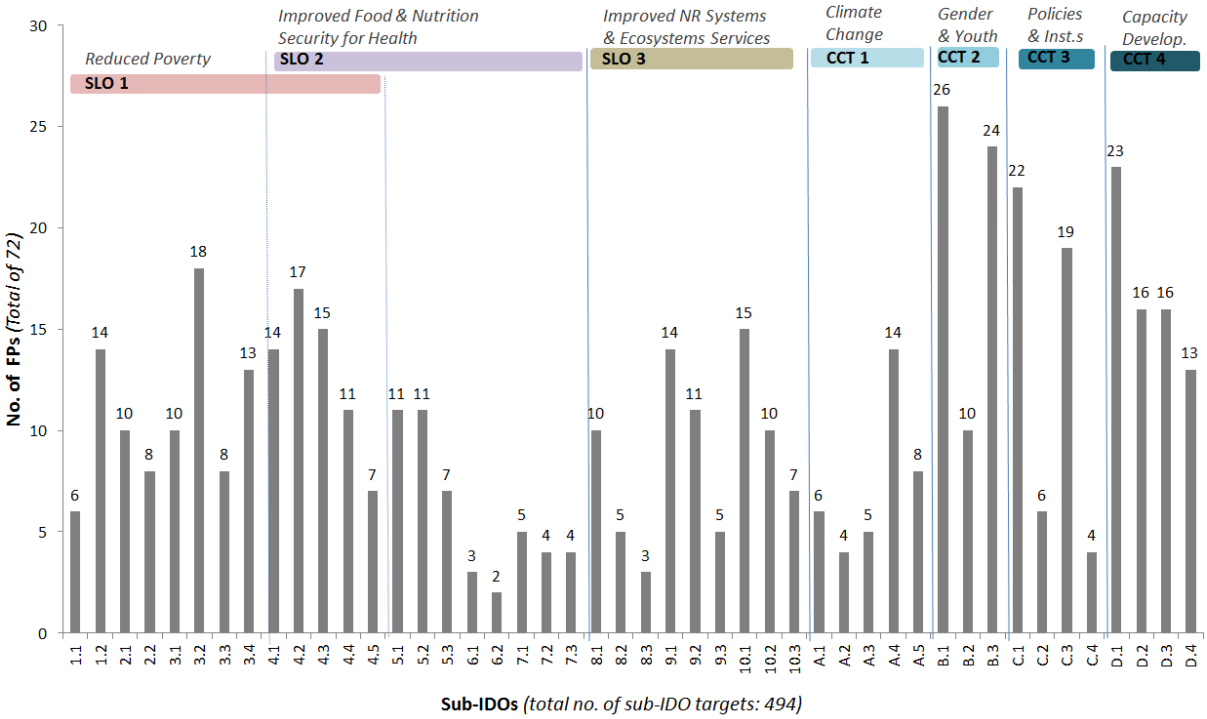
always strongly linked to the relevant Theory of Change and justifying the selection of a number of core partners would be more convincing.

Contributions to the Results Framework

Figure 1 shows the sub-IDOs (and hence the IDOs and SLOs) targeted by each Flagship. It shows:

- Every one of the 51 sub-IDOs is targeted by at least two Flagships (one CRP);
- Four cross-cutting sub-IDOs are targeted by more than 20 Flagships (8-11 CRPs);
- At the SLO level, the 13 sub-IDOs under SLO1 (Reduced Poverty) are targeted by Flagship projects 151 times; and the 15 sub-IDOs under SLO2 (Food and Nutrition) targeted 111 times; the nine sub-IDOs under SLO3 (NR Systems and Ecosystems) are targeted 80 times across the set of FPs[2].
- The least targeted sub-IDOs are ones which are specific to e.g., livestock and fish, food safety and conservation.

Fig. 1 Number of Flagships[1] targeting each sub-IDO



[1] Note in this analysis 3 core themes have also been included since they also identified sub-IDOs which they were targeting

It is not surprising that the Cross-cutting Themes on Gender and Youth and on Capacity Development are targeted by the highest number of Flagships nor is it surprising that Climate Change is targeted fewer times, given the success of CCAFS in engaging with all other CRPs. The most targeted sub-IDO on climate change is: 'Improved forecasting of the impacts of climate change and targeted technology development'. Two of the policies and institutions sub-IDOs are quite well targeted despite the existence of PIM, namely 'Increased capacity of beneficiaries to adopt research outputs' and 'conducive agricultural policy environment'. This probably reflects that PIM still has some way to go be as integrative as CCAFS. Under gender and youth the least targeted sub-IDO is: 'Technologies that reduce women's time and labour developed and disseminated'. Two of the policies and institutions sub-IDOs are quite well targeted despite the existence of PIM, namely 'Increased capacity of beneficiaries to adopt research outputs' and 'conducive agricultural policy environment'. For capacity development all 4 sub-IDOs are well targeted.

No robust list of priorities or method for prioritizing and allocating resources currently exists. A prioritization matrix based on the qualitative views of donors and experts has been compiled by the ISPC, but it is not yet robust enough to apply to the distribution of Flagships across the sub-IDOs, although this might be possible by the time of submission of full proposals.

The ISPC did not have time to evaluate in depth the CRP contributions to the development targets in the SRF, although some of the commentaries do note where we considered that the targets were unrealistic either in quantity or timing. Attempts to quantify such contributions should be approached with great caution since the performance indicators themselves are not always clearly worded, some cannot be measured or linked to credible baselines, others overlap, and some do not make statistical sense. In addition, given site integration plans, there may be overlaps in the claims made by some CRPs and it should be noted that unintended negative consequences on some targets may be associated with positive advances on others. Trade-offs between SLOs were in general not yet well addressed.

If the expectation is that progress towards such targets should be used in a performance management system, then a common model and acceptable data sources need to be used to enable all CRPs to provide consistent estimates. In the meantime, at the very least, CRPs should be required to provide annexed details of the sources of their estimates, and their calculations, in the full proposals.

Linking the IDOs of the Results Framework to the SLOs, and linking the SLOs to the Sustainable Development Goals, is an area where the CGIAR's overall theory of change could be considerably improved, although it is acknowledged that this is a formidable task.

Budget allocation between and within CRPs

Increase in funding from Phase 1 to Phase 2

When compared with the projected 2016 budgets in the Extension Proposals, the funds requested for 2017 in the pre-proposals show:

- A total portfolio increase from USD 1.047 billion to USD 1.345 billion, or an increase of 28%;
- However, there is great variation between the CRPs e.g. Dryland Cereals and Legumes show a decrease from USD 141m to USD 137m, despite absorbing parts of three Phase 1 CRPs, and CCAFS also shows a slight decrease;
- At the other extreme, Livestock shows a 290% increase from USD 43m to USD 125m, and Maize and Wheat also increase significantly;
- The other CRPs show more modest increases.

CRP and Flagship funding in Phase 2

Budgets were considered at the FP and CRP level and this showed that:

- The total six year budgets of the 13 CRPs is USD 8,553m;
- This averages out to USD 658m per CRP, USD 1,425m per year, and USD 109m per CRP per year over the six-year period;
- CRPs' six year budgets range from USD 983m (A4NH) to USD 401m (Fish AFS), excluding the five year budget of USD 149m for Genebanks++;
- Flagships range from USD 332m (FP1, A4NH) to USD 28m (FP5, Maize AFS), excluding the 'core theme' of WLE at USD 10m. Guidelines suggested that Flagships should have budgets between USD 20-100m over the six years.

It is clear from these figures that budget over-estimates are very likely. Many Flagships' budgets exceed the suggested maximum by 100% or more.

Funding sources

When the requests for W1/W2 funds are considered, a portfolio total of USD 519m is requested (excluding the Dryland cereals and legumes CRP for which no figures are available, and the Cross-cutting Coordinating Platforms which are yet

to be finalised). This is already more than double the USD 240m of W1/W2 funds expected to be available in 2017.

The anticipated W3/bilateral funds for the same 12 CRPs in 2017are USD 692m, which would represent 133% of *requested* W1/W2 funds, or 288% of *expected* W1/W2 funds.

Budget reductions and W1/W2 funds

The ISPC understand that the CB will be giving guidance on budgets for each CRP as they prepare full proposals. The ISPC suggests that the following principles should be considered:

- Many funding portfolios include a portion of funds for high risk/high reward research and also aim for an appropriate spread (depending on the maturity of the portfolio of research) of research from discovery to delivery. If CRP defined targets are to be taken into account in relation to budgeting, CRP proponents should be asked to provide details on this spread in the full proposals and, particularly, how the W1/W2 budget request will leverage W3/bilater funding to deliver on critically important outcomes that would otherwise not be forthcoming.
- The ISPC considers that W1/2 funds should be used more strategically for research that is unlikely to be funded through W3 or bilateral funding but is likely to add significant value to delivery of the portfolio as a whole. Our commentaries include some suggestions of such research within some CRPs.
- The ISPC noted large differences in management costs across CRPs. More transparency in terms of overheads and guidance on what is reasonable should be requested/given for the full proposals.

Key Conclusions

- Overall, the Phase 2 portfolio of pre-proposals and EoIs is impressive. It shows good alignment with the SRF and there is a genuine sense of a portfolio rather than a collection of programs.
- The concept of replacing commodity programs with agri-food system programs shows promise, but needs further development. A common definition of what is meant by an Agri-food System in the Call document would be helpful.
- While CCAFS has evolved into a 'Globally integrating program' over time the concept of being a GI CRP is more recent for the other three. A balance

needs to be struck between integration and transaction costs and in the full proposals the GI CRPs might wish to elaborate a phased process for integration with the AFS CRPs.

- Potential for greater co-ordination on foresight, prioritization and scaling appears to exist, although it is recognized that there are no 'one-size fits all' approaches.
- The pre-proposals showed (to differing extents) genuine progress on theories of change, and impact pathways, but there is still some way to go in terms of partnership strategies.
- Specific recommendations have been provided for each pre-proposal and EoI in order to facilitate the preparation of a strong portfolio of full proposals.

ISPC Key Recommendations

- Eight CRP pre-proposals are recommended to proceed to full proposals, incorporating recommended improvements.
- Four CRP pre-proposals are recommended to resubmit some documentation showing what actions they will take to respond to the ISPC commentaries, but in order to keep the coherence of the portfolio this may be less than a resubmission of the full pre-proposal.
- The Genebanks CRP is recommended for redrafting in another form, since its content is important, but it is not a CRP.
- Two CCPs are recommended to proceed to full proposals.
- Two other CCPs are not recommended as currently described.
- Further improvements to the Guidelines for Full Proposals are recommended, to include more clarity on agri-food systems and requesting further details on the basis of setting targets, ideally using a common model and metrics across CRPs.
- Agreement should be reached on guidelines and criteria for utilising W1/W2 funds.
- A web-based template is recommended for the full proposals.