SC2 – 02
Agenda item 3
For Discussion
Version: 14 September 2016

Considering the proposed 2017 – 2022 CGIAR Portfolio
ISPC Assessment, September 2016

Purpose

This document provides, as received on 14 September 2016, the following elements of CGIAR's Independent Science and Partnership Council advice to the System Council following its review of the revised full proposals submitted by CGIAR's Research Centers by end July 2016:

Part 1 ISPC Chair Cover Memo (2 pages)
Part 2 ISPC high-level summary table on the flagships (1 page)
Part 3 ISPC individual proposal assessments (92 pages), grouped as follows:

- Innovation in Agrifood Systems*
- Global Integrating Programs
- Platforms

The revised full proposals are accessible at: July 2016 Revised Full Proposals - CRPs and Platforms

* For note: As explained in the ISPC Chair's cover note, Part 3 of this paper does not include the ISPC's review comments on the proposal titled "*Grain Legumes and Dryland Cereals Agri-Food Systems*". By reason of the timing of submission of that proposal, the ISPC's assessment for this document will be available on 16 September 2016.

Distribution notice
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Independent Science and Partnership Council
CGIAR

SC2-03, Part 1
14 September 2016

Dr Nick Austin

Interim Executive Director, SMO

Dear Nick

I have pleasure in submitting, on behalf of the ISPC, our assessments of the proposals for 11 CRPs and 3 Platforms. As agreed earlier, we will submit our analysis of the GLDC proposal on Friday 16th September. Extra time was required since this proposal has been significantly revised and we sent it out for external review.

Also attached is a Table which rates the 11 CRPs and their constituent 52 Flagships. CRPs were considered against the following rating categories:

A+: Outstanding – of the highest quality and at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).

A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.

A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.

B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.

B: Fair – Elements of a sound proposal but has one or more serious flaws with only a weakly compelling vision; not recommended without significant change.

C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

CRPs are highly complex constructs and no proposal has yet evolved to the level of outstanding, in the opinion of the ISPC, although much progress has been made. A one-page summary of the key characteristics of each CRP is provided. Please note that we have included the beneficiary targets estimated by each CRP which were requested by the Guidance Notes, but the ISPC considers these in most cases to be aspirational.

Each Flagship was assigned a rating of 'Strong', 'Moderate' or 'Weak', based on assessment of strategic relevance and theory of change, scientific quality and comparative advantage. A table summarises the content of each FP, together with bullet points describing its strengths and 'weaknesses or risks', where 'risks' includes risks in relation to delivery of outcomes associated with the nature of the

research. This column is intended to enable donors to identify a balanced portfolio of FPs, in the knowledge of associated risks and the 'upstream/downstream' nature of the research

We also rated the 3 Platform proposals using the Categories described above for CRPs. Modules were not rated.

We would like to make it clear that the overall ratings of a CRP are not the sum of the ratings for the FPs. The CRP ratings reflect ISPC confidence in the ability of the leadership team and lead Center to deliver a coherent, integrated programme of research which has a long-term vision, is well aligned with the SRF and has a strong feasibility of delivery. The FP ratings reflect ISPC assessment of whether that FP is likely to generate international public goods which will make a significant contribution to the CRP as a whole.

Only 6 FPs are considered to be weak, compared to 15 as moderate and 31 rated as strong.

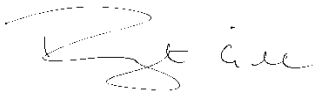
The ISPC compared these ratings with the equivalent ratings given at pre-proposal stage. At that stage there were 69 Flagships, whereas this latest round of submissions has 52 Flagships (excluding GLDC).

Of the 52 FPs (and taking account of mergers and re-ordering), 24 improved their rating, 25 stayed more or less the same and only 3 decreased in their ratings (i.e. the full proposal did not meet the expected earlier potential).

The ISPC recognizes that the funds requested in these proposals exceed the total amount likely to be available in Windows 1 and 2. We will therefore provide a short paper on Friday 16th September, at the same time as the commentary on the GLDC proposal, which will suggest further analysis that could contribute to decisions on W1 and 2 funding in the November SC meeting.

Section 3 of the assessment is an appraisal of the CRP responses to the major comments the ISPC made on the CRP proposals in our June 16 commentaries. This analysis is intended primarily for CRP leaders' use. The ISPC will be also continue analysing and assessing the additional comments and responses the CRPs have made in their revised proposal submissions and addendum of July 31, and we will make the results of this further analysis available to CRP leaders where needed and relevant.

Kind regards



Margaret Gill

Chair of the ISPC

ISPC Assessment of Revised CRP-II Full proposals 09-2016

	A4NH	CCAFS	PIM	WLE	FISH	FTA	LIVESTOCK	MAIZE	RICE	RTB	WHEAT
CRP Overall Score/category	**A**	**A**	**A-**	**A-**	**B+**	**B+**	**B+**	**A-**	**A**	**A**	**A-**
FP1	Moderate	Strong	Strong	Strong	Strong	Moderate	Moderate	Moderate	Strong	Strong	Moderate
FP2	Strong	Strong	Strong	Strong	Strong	Weak	Strong	Strong	Moderate	Strong	Strong
FP3	Strong	Strong	Strong	Strong	Weak	Strong	Weak	Strong	Moderate	Strong	Strong
FP4	Moderate	Moderate	Moderate	Strong		Strong	Moderate	Moderate	Strong	Strong	Moderate
FP5	Moderate		Strong	Weak		Strong	Weak	Weak	Strong	Moderate	
FP6			Strong								

Platforms

Genebanks	**A**
Big Data	**A**
Excellence in Breeding	**A-**

A+: Outstanding – of the highest quality and at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
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Independent Science and Partnership Council

14 September 2016

ISPC Assessment of the Fish Agri-Food System (FISH) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: B+

1. Summary

- FISH aims to supply improved breeds, aquafeeds, fish health plus aquaculture, and fishery management practices targeting 4.9 million households. The CRP aims to assist 3.5 million people to escape from poverty, 2.4 million malnourished people to address the lack of essential micronutrients in their diets, and 4.7 million women of reproductive age to consume adequately diverse food. Its technology and management practices will contribute to decreasing GHG emissions in small-scale fisheries (SSF) by 20%, increasing by 10% both water- and nutrient-use efficiency in 4.8 million Mt of annual farmed fish production, and restoring 3.3 million ha of ecosystems[2].
- This new CRP, led by World Fish, unites an impressive set of leading research organizations including IWMI and three advanced research institutes, namely Wageningen University, Natural Resources Institute/University of Greenwich, and the James Cook University as its managing partners. The CRP also aims to link to a convincing set of multi-stakeholder partnerships to harness emerging science in aquaculture and fisheries with the potential to deliver development outcomes at scale. Recruitment of a new CRP leader was only recently concluded, and it is therefore not possible to assess leadership, a key criterion for success, at this stage.
- The proposal, designed with the involvement of a diverse range of stakeholders, makes a strong and generally adequately evidenced case that fisheries and aquaculture are central to global strategies to reduce poverty and improve food security and nutrition. It also provides strong arguments that the CRP could make a significant contribution to delivery at the CGIAR system level by detailing the relationships between its flagship and relevant SLO targets. In doing this, it goes to great length to explain the process used in setting the CRP's targets for contributions to the SLOs.
- The CRP's potential contribution to productivity, sustainability, and resilience will strongly depend on the further articulation of functional linkages and synergies among its FPs. In addition, whilst the proposed relationships with other CRPs, including iCRPs and platforms, seem relevant, such linkages are also in need of further clarification and development.
- Insight into the feasibility of the CRP delivery has been aided by the recognition and clarification of the capacity building investments required to realize the intended impact pathways. Further strengthening of the underlying science and evidence base, for parts of the proposal, as well as a greater recognition of the complexity of systemic change, and FISH's capacity to influence and contribute to such change, would have reduced any remaining ambiguity further.

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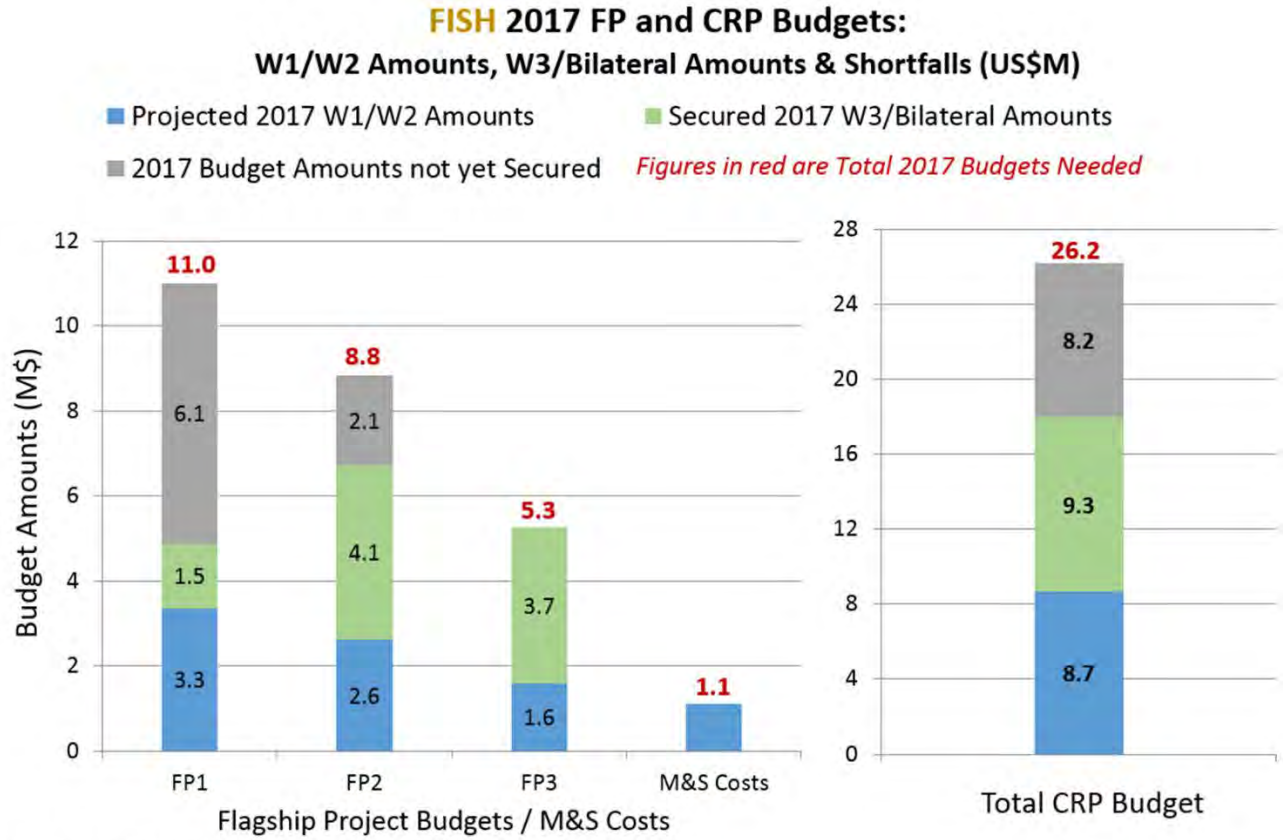
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

[2] The CRP targets have not been independently verified.



Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1 Sustainable aquaculture Focus: Productivity-improving technologies and management practices to increase farmed fish production.	• Unites leading scientists and science organizations in fish genetics, health, nutrition, aquaculture systems and sustainable intensification. • Balance between development of additional genetic technologies and the understanding of barriers to impact at scale. • Articulation of the centrality of the FP's chosen approaches to fish genetics, breeding and management research to sustainable increases in farmed fish supplies.	• Magnitude of expected outcomes not supported by past impacts from fisheries R4D. • Lack of clear strategies to address unintended consequences and trade-offs inherent to proposed research focus. • Lack of clarity of local and international networking and partnership arrangements beyond research actors.	Strong
FP2 Fish in multifunctional landscapes Focus: Governance of SSF for food security and resilience of fishery-dependent households.	• Breadth of scientific and practical leadership in SSF. • Potential to bring together relevant CRPs around the issues of water quality. • Degree of alignment with national and regional priorities and initiatives. • Partnership strategy within and without the CGIAR.	• Weak articulation of the understanding the complexity of achieving systemic change. • Evidence base in this area of research is evolving rapidly. • Strategy to scale results up and out not tested.	Strong
FP3 Enhancing the contribution of fish to nutrition and health of the poor Focus: Increase the availability and consumption of safe and nutrient dense fish by poor consumers, especially women and young children.	• Scientific leadership and ability to bring together a world-leading network of partners to address issues related to nutrition-sensitive aquaculture and fisheries. • Clarity of intended outcomes for target geographies with annual milestones and proposed impact pathways. • Networking and partnership arrangements at local levels clearly organized on subsidiarity and comparative advantage.	• Potential inconsistency with current evidence on the greater efficacy of nutritional impact and the economic benefits of fish-based supplements. • Lack of articulation of a convincing strategy to attain indicated pervasive impact across countries/regions. • Lack of clarity on the linkages with the other FISH FPs.	Weak

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. A description of the process which the CRP intends to use for further priority setting and closer functional integration with the other AFS CRPs and GIPs.	FISH overall priority setting across its research portfolio uses both quantitative and qualitative analysis of the probability of success considering four dimensions such as science challenge and capability, capacity to deliver, clarity of planned outcomes and clearly defined delivery pathways. Further details are also given in the response, particularly to address specific issues brought to the attention of the proposers in the ISPC commentary.	**Satisfactorily addressed.** Response satisfactorily addresses the ISPC commentary. It also provides additional information to deal with other points brought by to the attention of the proposers related to funding allocation, and the integration and collaboration with other CRPs (e.g. A4HN, CCFAS, RICE, WLE, Excellence in Breeding platform). The three areas that FISH highlights as examples of the close integration with other CRPs, *foresight modeling, nutrition strategies of governments and development agencies and climate smart agriculture options*, could have been more effectively used as components of the FISH priority setting process, but this opportunity has not been considered in the addendum. The activities listed as new co-investment and of high priority (e.g. cassava waste for fish feed, sorghum in fish feed) are not novel. FISH does not consider the fast growing area of research on edible insects for fish, and poultry feed.
2. The provision of supplementary information to better support the CRP and FP TOCs including the supporting evidence base, the concomitant capacity development and a deeper analysis of complexities.	The potential trade-offs and unintended consequences are detailed in the ToC narratives for the FPs, particularly the table within each FP detailing the change mechanisms, key risks and assumptions, and corresponding management actions associated with each (Tables 7, 12 and 17). Results-Based Management Annex (Annex 3.6) re-written partially to	**Partially addressed.** Response partially addresses the ISPC concerns. Edits made in revised proposal contribute to the improvement of the ToCs and clarify the capacity building investments required to realize the intended impact

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	describe how assessment of strategies to identify and manage risks and unintended consequences will be integrated into program-level M&E system.	pathways. In some cases, however, the underlying scientific basis, the recognition of the complexity of systemic change, and the evidence base supporting FISH's capacity to influence policy, remains thin.
3. Checking and clarification of the internal consistency of the CRP's outcome targets and validation against poverty reduction achievements based on evidence from the CGIAR.	Annex 3.11 (new) included in FISH proposal v2 provides details on setting outcome targets, assumptions made and corresponding evidence applied in target setting for the CRP.	**Partially addressed.** The response partially addresses the concerns raised by the ISPC. New annex 3.11 (16 pages) includes the relationships between flagship targets and SLO targets and explains the process used in setting the CRP targets for contributions to SLOs, including some illustrative examples regarding the considerations and assumptions used for setting country-level targets. Table 1 in the annex therein provides further data on the contribution to SLO targets disaggregated by country or region. No real attempt has been made, however, to validate the proposed outcome targets against past impacts from fisheries development / fisheries R4D.
4. Additional clarification is needed on how it will balance its research agenda between the need for context specific response while at the same time achieving impact at scale, both in its technology and policy work.	Overview section of ToC (1.0.3), science quality sections of each flagship, and in revised annexes on partnerships (Annex 3.2) and capacity development (Annex 3.3) provide this clarification. There are further minor revisions for FP1 text (Sections 2.6, cluster 3 and Section 2.7 on partnerships) that give details on enterprise--related research activities, which gives clarity on the role of FISH research and partners in scaling of FP1 business and entrepreneurial models.	**Satisfactorily addressed.** Response deals satisfactorily with the concerns raised by the ISPC.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
5. The provision of greater detail on the CRP's further development of its partnership and gender strategy.	Table 2 added to Annex 3.2 on partnerships to complement the analysis of strategic partnerships. It provides specific examples of how the programme will work with partners to achieve targets. Furthermore, Tables 8, 14 and 18 of the proposal) include examples of non-CGIAR partners at discovery, proof of concept and scaling stages of the impact pathways, thus showing how FISH will pursue a partnerships focused implementation strategy with the aim of harnessing the strengths of institutional comparative advantage guided by the principle of subsidiarity. The overview of gender strategy (section 1.0.4 and Annex 3.4) revised to address explicitly the role of gender research in the FISH ToC and for individual flagships.	**Partially addressed.** The response partially addresses the ISPC comments. Changes made in the revised proposal provide additional detail on partner roles and their importance in achieving impact, and FISH's gender research strategy.
6. The specification of time allocations to FISH by the indicated staff and availability of gender and process-related research skills among staff.	Gender Annex (3.4) now includes an explanation of the gender staffing planning process, from which an outcome-based map ensued to guide staffing decisions. This Annex explains how this process led to a significant planned increase in both staff with gender research skills across the focal countries, and the level of expertise of these planned staff in focal countries, vis-à-vis ongoing AAS CRP. Senior positions added to revised Annex 3.8 (staffing list) and as noted in Annex 3.6 (results-based management), learning from implementation will guide an adaptive approach to program implementation, which includes proactive efforts to identify and fill skills gaps through both staffing and partnerships.	**Satisfactorily addressed.** The revised proposal deals satisfactorily with this commentary as noted in previous column.

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7. Terms of Reference [ToRs] for the CRP director to be subject to international recruitment to be included.	Annex 3.8 provides the ToRs for the FISH CRP Director. The role is proposed to be fully integrated with the WorldFish position of Director, Aquaculture and Fisheries Sciences.	**Satisfactorily addressed.** Response satisfactorily addresses the ISPC concern. The ToRs were used in the recently concluded recruitment of WorldFish's Director, Aquaculture and Fisheries Sciences.
8. The clarification of the foundational science at the basis of FP3 on *Enhancing the contribution of fish to nutrition and health of the poor*.	The response refers to Thilsted et al. (2016), who summarized the foundational research for the program's focus on increasing the quantity and frequency of consumption of fish. Minor edits made in FP3 aim to demonstrate gains due to production and supply of nutrient-rich small fish, improved fish value chains and development and consumption of fish-based products; and to communicate the lessons for maximum effect in focal and scaling countries.	**Partially addressed.** Response does not address the comment but repeats information included in the original proposal. Given that FP3 remains largely unchanged, the ISPC's concerns in respect of the clarification of the foundational science, required research focus and the current version of the ToC, equally remain largely unchanged.
9. Proponents should re-write FP1 taking into account comments provided below, particularly regarding the critical role of developing additional genetic technology, which will need additional supporting evidence given the proposed level of investment.	FP1's revised text taken into account IPSC commentary. The key points and responses (indicating changes made) are summarized as last item in addendum 1.	**Satisfactorily addressed.** Revisions made to FP1 satisfactorily address the ISPC concerns and increase clarity, through the inclusion of additional detail and articulation of the centrality of the FP's chosen approaches to fish genetics, breeding and management research to sustainable increases in farmed fish supplies.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Forests, Trees and Agroforestry (FTA) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: B+

1. Summary

- The CRP on Forests, Trees and Agroforestry supports a portfolio of projects of high strategic importance to the CGIAR related to forest management, agroforestry, land-use change, and climate change. In aggregate, the CRP aims to: assist 19 million people to exit poverty through improved livelihood options and food security to 31 million farm households; improve governance in 25 countries and business practices in 20 multinational companies (directly), indirectly influencing 500 private sector actors; reduce 0.2 Gt CO_2eq /yr in GHG emissions; and restore 30 million ha of degraded land area[2].
- The CRP is structured as five Flagship Projects (FPs) responding to research challenges that, while subject to feedback loops that create inter-dependencies across scales, are broadly nested in ascending scale from the level of genes to the level of the integrated global climate system.
- The impact pathways from research at each of these scales usually hinge on achieving changes in government policy or private sector practice, or through institutional innovations. The major outputs are a range of new decision-support tools, and participation in multi-stakeholder / co-learning / landscape approaches. While it is certainly difficult to generate rigorous evidence of effectiveness in these kinds of complex change processes, the CRP could be doing more to document the linkages between research outputs, research outcomes, through to development outcomes.
- The underlying biophysical / ecological / forest management research taking place at ICRAF and CIFOR is often of very high quality. However, the CRP theory of change is strongly based on the assumption that a lack of technical knowledge is the binding constraint to improved management of competing land-uses at all scales. One of the risks for the FTA CRP is that it generates a supply-driven portfolio of technical research.
- The alignment with the SRF is strong for SLO3. There is however a generally low level of clear differentiation regarding how the individual FPs are expected to contribute to sub-IDOs. This is symptomatic of both a lack of prioritization and a difficulty in articulating credible, focused theories of change at CRP and FP level.
- FTA contains some high quality biophysical research with potentially significant policy implications, and a number of strong flagship projects. There is also research within the CRP that has the characteristics of international public goods.
- A permanent leader has yet to be appointed for the FTA CRP, which has contributed to the fact that it has yet to live up to the potential shown at the pre-proposal stage.

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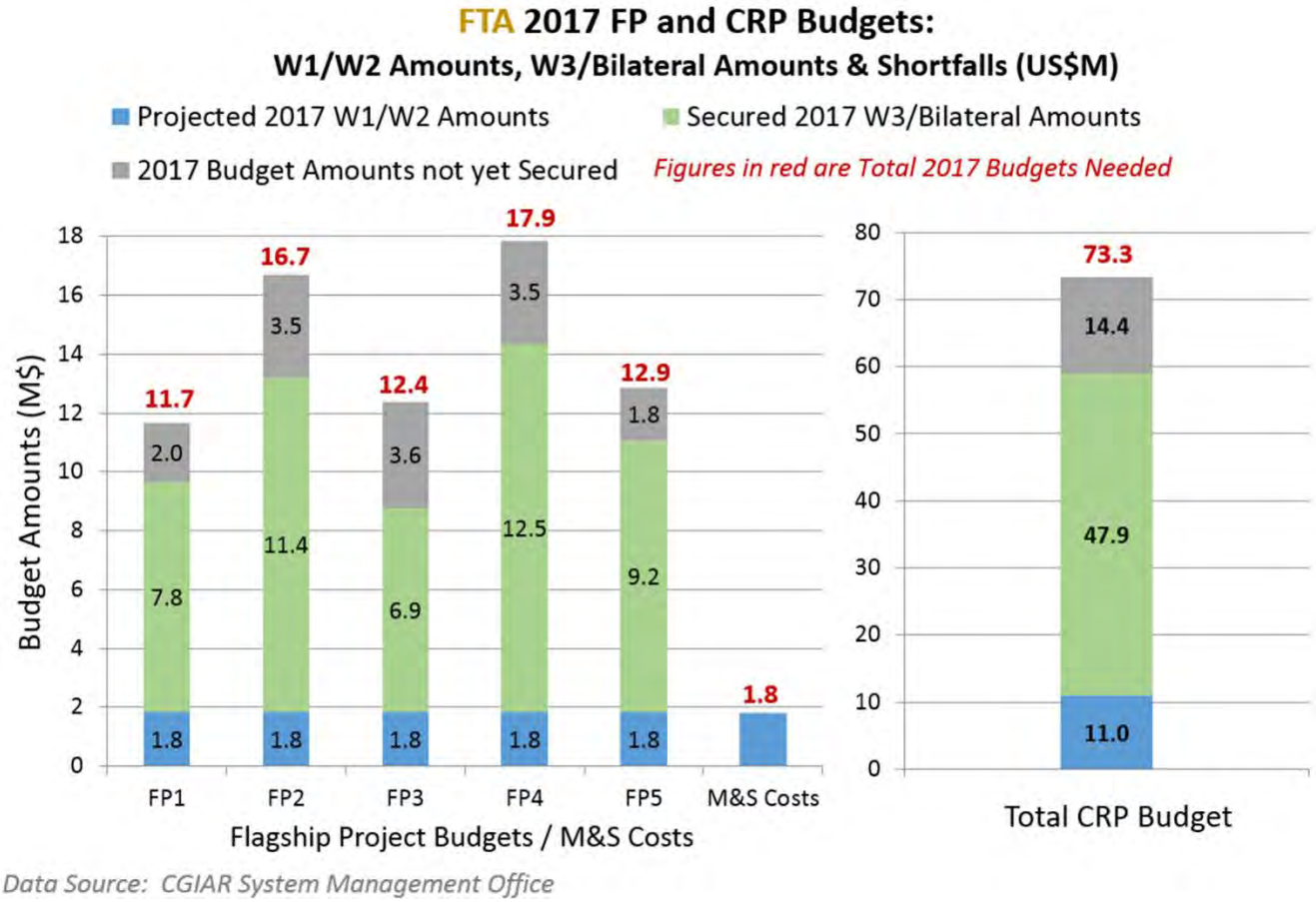

Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Tree genetic resources to bridge production gaps and promote resilience Aims to translate ecological research into policy-oriented tools relating to safeguarding genetic diversity, tree domestication, and planting material delivery.	• Comparative advantage in tree genetics is well-established. • A good track record of delivery of online tools for decision support gives a degree of confidence about delivery of the research outputs.	• Not clear that a lack of technical advice, or a lack of specific tools for use in policy processes, are the binding constraints preventing more tree-planting. • A major weakness is the absence of relevant partners working on policy in relevant areas. • Lack of focus and realism in impact pathways – with a highly diffuse set of 17 different sub-IDOs targeted – makes accountability unlikely.	Moderate
FP2: Enhancing how trees and forests contribute to smallholder livelihoods Aims to develop context-specific options for smallholders that will be congruent with sustainability principles at landscape and livelihood scale.	• Understanding smallholder livelihood options associated with trees is an important topic for the CGIAR.	• It is not clear how the research in this FP will generate a broader understanding of diverse contexts, hence raising questions about capacity to deliver proposed targets. • Over-emphasis on contribution of trees to smallholder livelihoods. • The coherence of the set of different production systems selected for research remains unclear.	Weak
FP3: Sustainable global value chains and investments for supporting forest conservation and equitable development Supports uptake of more intensive and integrated agricultural production and forest management systems, with the goal of	• Strategically relevant research that aims to reconcile trade-offs among SLOs 1 and 3 on a regional to global scale. • Synthesis of state of research in the field is excellent, giving confidence in	• CGIAR investment in the CoA on 'Scaling through responsible finance and investments' is low, with the assumption that there will be complementary investment from the private sector. Without this outside investment, targets will not be met.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
reducing deforestation while meeting growing demand for high-value crops.	the proponents' ability to deliver, and indicative of high quality research. • Established partnerships and track record consistent with strong comparative advantage.		
FP4: Landscape dynamics, productivity and resilience Place-based research that aims to support negotiation of trade-offs among the SDGs – examining the inter-linkages between land-use / land-cover change and the provision of ecosystem services – through new policy instruments.	• Strong comparative advantage and scientific track record of the researchers involved. • Innovative research on an important topic. • Sophisticated understanding of why some interventions are successful.	• Lack of strong evidence of the effectiveness of "landscape approaches" in reconciling conservation and economic development objectives has been well-documented.	Strong
FP5: Climate change mitigation and adaptation opportunities in forests, trees and agroforestry Research on mitigation, adaptation, bioenergy and cross-cutting performance assessment, to clarifying carbon and non-carbon benefits from alternative policy instruments at national to global scales	• Scientific leaders of FP5 are at the cutting edge of the climate change – land-use debate. • Strategy for national partner engagement is well thought-through and likely to succeed. • Alignment and potential for partnership with CCAFS research on mitigation.	• The deliverables from the CoA on adaptation are unclear, making it difficult to judge feasibility of the theory of change.	Strong

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. "The mismatch between evidence of documented historical impacts, and expected future impacts, is stark. Even though targets are overly optimistic for many CRPs, FTA is an outlier among all CRPs regarding targets that lack credibility, particularly the one relating to the number of farmers likely to be lifted out of poverty. Sections of the proposal which refer to targets or provide justification for the figures quoted need to be rewritten. The revised CRP should have a stronger rationale for targets, including past evidence, especially for SLO 1."	FTA responded by stating that given the magnitude of the areas and populations living in and/or depending from FT&A systems, they continue to believe their targets were realistic. However, they recognized that they had used an additive model, to calculate the sum of the targets across an FP for one country. In response to the reviewers' comments, they agreed that it seems more reasonable to use a combined model, as the beneficiaries are likely to be the same – at least partially – when several FPs operate in the same country. A completely revised Annex 3.12 was included. The assumptions and evidence used to develop aspirational targets provides a stronger rationale as well as revised assumptions behind our targets, supported by examples of past achievements. Each target now details the total target population, how FTA research can bring solutions, our expected contribution based on FTA Phase I, the geographic coverage and existing portfolio of activities, examples of past or current achievements, and caveats wherever relevant. Section 1.0.2 – Goals, objectives, targets has also been revised and updated with the new revised targets values. PIM Table A has been updated in the online tool and the aligned proposal document	**Partially addressed.** The evidence presented of past adoption rates was not well referenced in support of uptake by millions. The evidence on FTA research lifting people out of poverty was even less convincing. The pathways between research outputs and income are not as straightforward as appears to be assumed on p 156 of the Annexes. The key objective for the addendum, to provide a stronger rationale for targets, especially for SLO 1, has been addressed but the information presented does not materially change our opinion of the underlying problem i.e. there is little evidence of a central priority-setting function by the CRP management.

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2. While the team of FP leaders is impressive, FTA directorship has been unclear for some time, and despite expectations that a director would be appointed in late 2015 this has not been resolved. ("At the date of submission, the DDG-Research of CIFOR is the acting FTA director as the position is under recruitment" p. 38). The uncertainty regarding this vacancy should be resolved before 31 July 2016.	The Addendum notes that recruitment of a new FTA Director has been carefully considered by the Independent Steering Committee, especially in light of uncertain funding and future scenarios for the CRP (for example, not long ago there were plans to merge FTA with WLE). However, the Acting Director has assumed full responsibilities during this period of adjustment, and as such there has been no void in leadership. Recruitment timeline: • The FTA Director position was still open during the full proposal preparation and closed on 31/03. • A long list was created in concert with the Independent Steering Committee. • A short list was developed and candidates were interviewed by phone in June 2016. • Two potential candidates have been selected and will be interviewed in person by a panel on 1 August 2016. • Depending on the actual fate of FTA and on available funding, the selected candidate will begin at the start of 2017.	**Partially addressed.** Progress with recruitment is noted, but the nature of the responses in the Addendum continue to concern the ISPC that insufficient time is being given to leadership of this CRP, given the dual role of the Acting Director. This will continue to be flagged to donors as a risk to delivery until the ISPC has had the opportunity to assess a nominated Director.
3. The proponents should attach an annex that clarifies site integration plans with respect to the role of the sentinel landscapes, including results from Phase 1.	A new Annex 3.19 was included - Creating a data-driven network of socio-ecological indicators across the Global Tropics that details the requested information about the Sentinel Landscapes.	**Satisfactorily addressed.** Annex 3.19 is very helpful in providing useful, quantitative data on indicators such as erosion and tree density as well as bio-economic data in relation to sentinel landscapes. It is surprising that such information was not included in the original proposal. However, referencing is not very clear and it was difficult to

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	In addition, the narrative of Section 1.0.7 – Cross CRP collaboration and site integration was updated to synthetize FTA's involvement in the site integration process including the Sentinel Landscapes. The detailed information about site integration is in the Template 2b of Annex 3.7.	establish where the data came from. Nonetheless, the team makes a convincing case for outcome-oriented, place-based research complemented by long-term monitoring.
4. The revised proposal should do more to strengthen the argument for why the individual FPs add up to more than the sum of the parts.	Completely revised the CRP narrative *Section 1.0.6 – Program structure and Flagship Projects* and includes a new Figure (1 on p 29 of the new narrative) which illustrates the two-way exchange of knowledge between the Flagships. There is also information earlier (section 1.06) on the role of the Support Platform which will use 'all methods of interfacing and coordination between FPs'.	**Partially addressed.** The new diagram does illustrate the potential for connectivity between the FPs, but the all-embracing nature of what is proposed for the Support Platform does not suggest that a strategic approach has been thought through. The degree of specialization at the FP level between ICRAF (1,2 and 4) and CIFOR (3 and 5) does not help enhance the idea of synergies at CRP level from the often high quality research taking place at FP level.
To this end, an additional annex describing the priority-setting process that was applied to the planning of the CRP, and the results of the process, is requested.	A new Annex includes < 2 pages on prioritization, at CRP and FP level. At CRP level, priority setting included an on-line questionnaire of forestry professionals (which generated an impressive 2,500 research questions) as well as lessons learnt from FTA Phase I. At FP level the approach incorporates recognition of demand, alongside internal lesson learning and outward looking foresight and assessment of opportunities arising form site integration activities. Prioritization of policy-related research appears to be developed internally.	The comment that '…A core portfolio of research in development supported by bilateral projects' also raises concerns - bilateral funding is important, but it is unfortunately rarely strategic to the extent that should be expected when prioritizing justification for W1 and W2 funding. In summary, the additional annex was unconvincing and did not materially change the ISPC's opinions of the underlying issue about poor prioritization.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Livestock Agri-Food System (LIVESTOCK) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: B+

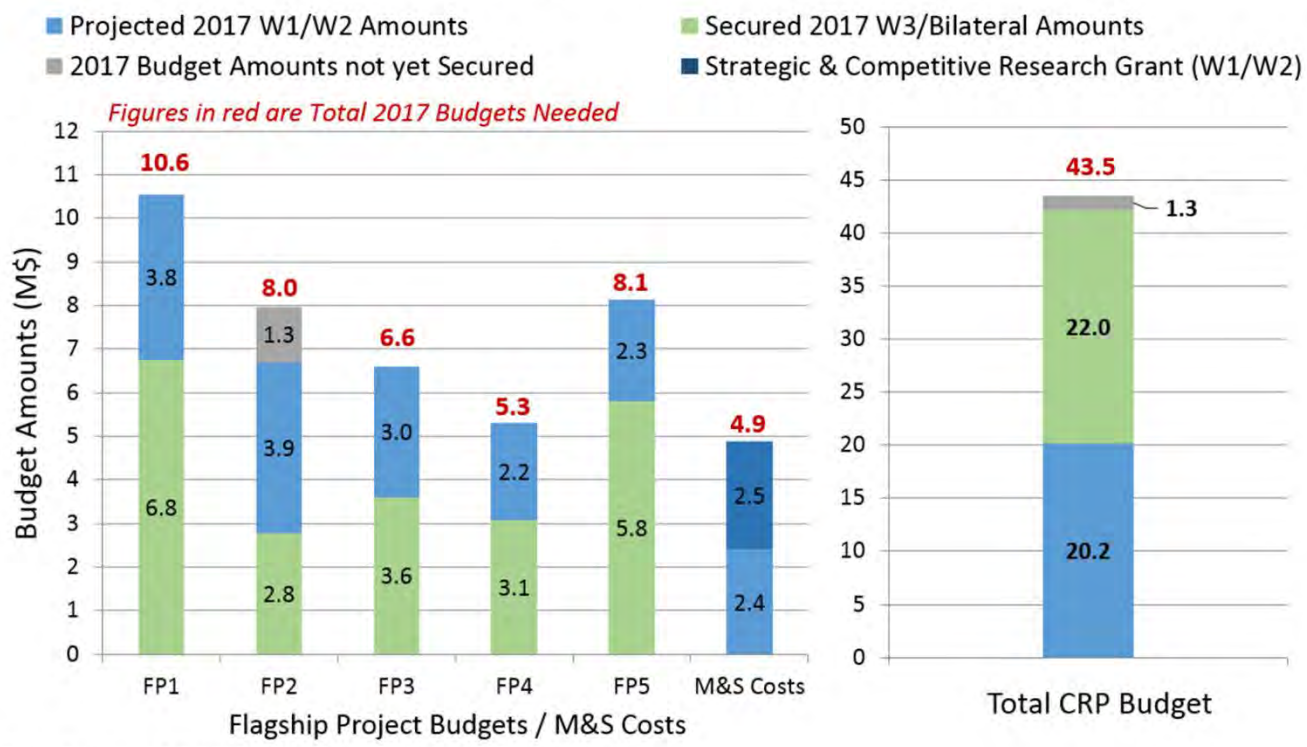
1. Summary

- CRP LIVESTOCK provides research-based solutions to drive the transition of smallholder farmers, pastoralists, and agro-pastoralists to sustainable, resilient livelihoods and productive small-scale enterprises that will help feed future generations. The research spans multiple commodities: cattle (milk and dual-purpose milk-beef), poultry (eggs and meat), pigs, sheep and goats. LIVESTOCK aims to assist 4.13 million people exit poverty; 6.5 million households adopt improved feeding options and strategies, integrated herd health packages, and/or genetically improved livestock; 11.5 million people meet minimum dietary energy requirements; restoration of 13.69 million ha of degraded land; and reduction of agriculture-related GHG emissions by 0.08 Gt CO_2eq/yr[2].
- The CRP makes a credible case regarding multiple links and pathways between livestock-related research and grand challenges in the SRF, in particular the close links between livestock systems and GHG emissions, climate-related resilience, water use, nutrition, and food safety.
- The CRP has demonstrated its strong commitment to participate fully in the site integration plans that have been developed. The locations seem well-suited for the anticipated program of research, and eight out of the nine value chain research hubs overlap with new site integration countries.
- The CRP's premise is that increased productivity and growth in the smallholder livestock sector will meet the increasing demand for animal-source foods in developing countries, including in urban areas. The proposal does not, however, adequately recognize the transformations away from the smallholder sector which are already occurring in the livestock sector in some countries.
- The CRP is organized around Genetics, Animal Health, Feeds and Forages, Livestock and the Environment and Livelihoods. While there is some potential for improving productivity of indigenous stock through breeding, health packages and improved feeds, the expectations on delivery are not supported by evidence of past success.
- This is a new CRP but with the same leader as the Phase 1 Livestock and Fish CRP. The Phase 2 CRP has a much stronger technology focus than CRP L&F.
- The proposal envisions productive and close relationships with integrating CRPs i.e., A4NH (co-lead on human health related aspects), CCAFS (co-investment in emissions work, climate policy), and WLE (targeting water use efficiency, land degradation and restoration). The CRP has improved its connections to other AFS CRPs.

[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

[2] The CRP targets have not been independently verified.

LIVESTOCK 2017 FP and CRP Budgets:
W1/W2 Amounts, W3/Bilateral Amounts & Shortfalls (US$M)



Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Livestock genetics Aims to apply new genetics and genomics opportunities (in combination with management strategies) to increase livestock productivity.	• Potential strategic relevance as enhanced genetics can represent an important avenue to improving productivity of indigenous livestock. • High scientific quality as it intends to leverage advances in genomic, phenomic, and breeding research. • Comparative advantage through research partnerships.	• Weak justification that genetic potential of indigenous livestock species is a limiting factor for the focus systems; and, that demand will be met through existing indigenous stock. • The comparative advantage in livestock genetics for indigenous breeds is clear, but FP1 may lack a comparative advantage if systems shift towards imported genetics.	Moderate
FP2: Livestock health Aims to improve animal health through herd health management, vaccines and diagnostics.	• Addresses a key problem area as high prevalence of livestock diseases cause significant loss to producers, and poses risks to human health from livestock diseases. • A holistic approach to health that feeds into an alternative model of animal disease management. • Appropriate strategic science partners with strong track records.	• Weak justification for selection of priority diseases. • Risks inherent in vaccine development and delivery that may impede the likelihood of impact. • Insufficient specification of timeline of impacts: the additionality is unclear since many outputs are based on current pipeline.	Strong
FP3: Livestock feeds and forages Aims to increase livestock productivity and reduce environmental impacts by identifying, testing and delivering superior feed and forage strategies and options.	• Potentially high strategic relevance as animal nutrition is a constraint to productivity increases, especially within the targeted smallholder systems. Key sub-sector in livestock-related GHG emissions, potential for sequestration/mitigation outcomes. • Collaboration across the CGIAR on feeds and forages.	• Weak track record of delivery at scale. • Comparative advantage vis-à-vis other comparable research and the development of private sector feed industry is unclear. • Lack of detail on research priorities, science outputs and timelines.	Weak

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Livestock and the environment Aims to enhance the efficiency of natural resource use, and reduce the negative impacts of livestock production on ecosystems while enhancing the positive ones and adapting livestock systems to future climate change.	• Strong strategic relevance to SLOs/SDGs: livestock sector is a major driver of climate change and potential for generating IPGs high. • Clear track record in some FP focus areas (e.g., emissions modelling, rangeland management). • Promising research collaborations with CCAFS and WLE on resource management and environment policy issues. Elaborated linkages with other FPs.	• Narrow approach to research prioritization with focus on climate change aspects of livestock and environment. • Little specificity on systems approach and analysis of trade-offs.	Moderate
FP5: Livestock livelihoods and agro-food systems Aims to maximize livestock based livelihoods and resilience to risk among women and men smallholder and pastoral producers and their communities.	• Potential strategic relevance is high with clear theory of change. Appropriately focused on value chains. • Indications of links with PIM and A4NH on foresight, policy, value chains, nutrition, and food safety.	• Unclear basis for prioritization of scientific research questions. • Generalizability of smallholder dairy success story is questionable. • Significant risk that research will deliver only localized outcomes and impacts.	Weak

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. For all Flagships, additional explanation on scientific opportunities identified through the priority setting process and their relevance to CRP and Flagship-level Theory of Change is needed. Such a narrative should include evidence on the most important constraints to achieving stated objectives (identified from past work), and how research can address these constraints and deliver outcomes/impacts.	Framework that drives CRP/FP prioritization: Functioning markets with vibrant, inclusive private sector, reliable supply of livestock commodities and enabling policy environment are prerequisites for adequate supply of animal source foods (ASFs) to rural and urban consumers while generating sufficient income (mostly smallholder producers) and securing the natural resource base. The specifics within Flagships takes into account the need to deliver some short term solutions (achieved in six years) while recognizing the need for investment in new technologies that will be critical to maintaining productivity over the next 10-20 years but will take much longer to deliver. Acknowledges that the three elements (markets, productivity, enabling environment) have been the subject of decades of research, but development impacts have been questioned, necessitating the need for re-evaluation and prioritization of 'traditional' areas. CRP's review of evidence concluded that three elements are interdependent and must be addressed together to achieve impact. And, that the balance and prioritization of activities across three elements depends on context-specific constraints and is expected to change over time. Globally, work is being undertaken to develop and apply an appropriate framework to guide prioritization for livestock research in line with the conceptually powerful crop yield gap analysis approach.	**Partially addressed.** This response embraces the ambitious idea that an integrative approach is needed to address problems in production, supply and consumption of ASFs, and that transformational change will require attention to entry points that will most readily achieve net gains across each of the food system domains. There is a trifurcation in terms of research entry points: technologies, genetic gains, and policies. The CRP also differentiates between short term solutions that can be delivered within six years and longer term investments which may deliver in 10-20 years. That said, the underlying agenda still seems to be focused on 'yield gap' thinking, and a focus on smallholder systems. Overall, despite sound reasons for focussing on smallholder animal production systems, including the argument that scientific opportunities are intense for these systems and these are under-researched elsewhere in the world, it is important for the CRP to better articulate and defend the role of livestock in smallholder production systems in meeting the growing demand for ASFs.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
2. Present further clarification on the scientific rationale underpinning the research focus on improved livestock breeds, vaccines, and improved feeds and forages; how the broader technical advances will lead to research success within six years; and, how risks will be mitigated or managed.	Detailed response to each of the sub-questions. A continued focus on yield gaps and genetics is justified by the assertion that smallholder productivity is the overall livestock research goal of the CRP, and it is argued that this cannot be improved without addressing genetic of indigenous stock. Hence, the portfolio includes a range of approaches (indigenous breed improvement, cross breeding, etc.) along with improved commodity traits and conserving genetic adaptation of indigenous livestock to environmental challenges. FP1 also includes an important discovery component (indigenous livestock genome characterization). References to publications that document links between genetics/genomics approach and livestock trait performance (commercial breeds) included. In the short-term, research successes rely on delivery and implementation of established (demonstrated at smaller scale in Phase 1 CRP L&F) technical solutions such as artificial insemination (dairy), mobile technologies for on-farm live recording of performance (chickens, dairy) etc. Vaccine research is acknowledged to be an enduring and long-term need, but the application of new science and lab techniques (systems approach with big data and multidisciplinary science) is proposed as the way to enhance the rate of vaccine development, cost-effectiveness and speed of delivery. Short-term deliverables will stem from improvements to existing vaccines (PPR, CCPP, ITM for ECF), enabling policy environment for livestock healthcare strategies etc. For improved forage work, the main innovations centre on cassava peels, brachiaria and multi-purpose cereals, each of which represents part of an existing	**Partially addressed.** Genetics and novel vaccines/herd health are certainly important goals offering much promise of impact, but there isn't enough evidence to strengthen the argument that established technical solutions can deliver targets within six years. This risk is higher for the feed and forage work where scaling up of existing solutions is critical for results at scale. This doesn't invalidate the proposal, but there are implicit assumptions about high returns and relatively low risks.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	pipeline of research. The constraints to scale and lasting impact are described as lack of appropriate and responsive solutions, as well as delivery and business models. Having feeds work bundled with other technological solutions and developed in the context of wider LLAFS related ambitions (livelihoods, food security etc.) is proposed as one of the approaches to address this. The potential risks associated with each line of research are addressed separately in the Addendum. There are said to be few risks attached to the technology development stream, and risk to scaling up of forage work is said to be mitigated through FP5. For the vaccine and herd health work, inclusion of processes to ensure "stop-go" decisions so investment doesn't continue without due cognizance of the likelihood of success (informed by technical progress and feasibility as well as the realities of disease prioritization in focus systems and value chains) forms the risk mitigation strategy.	
3. Provide additional information on the functional integration with other AFS CRPs to clarify how the LIVESTOCK CRP will influence trait discovery in crop breeding CRPs and assess potential trade-offs between the uses for crop and livestock production.	Work on full purpose crops was developed in close consultation with AFS crop commodity CRPs. This is viewed as a new paradigm in crop improvement, and draws on experiences from research on most key cereal and legumes in first Phase. Example of proof-of-concept studies influencing new variety release cultivar traits (for sorghum and pearl millet) are given. The idea of trade-offs in growing or purchasing fodder/food is made explicit, and is acknowledged as an important factor in determining adoption and scale-up of innovations. A systems lens is proposed to	**Satisfactorily addressed.** The response suggests that the CRP sees itself as providing information that other CRPs would need to incorporate into their genetic improvement and breeding activities in the long run. This logic is fine, with some embedded risks i.e., if the information provided is not in line with the demand or priorities of other CRPs. It will be important to identify how the agro-economic and economic trade-offs would be addressed through LIVESTOCK CRP in a way that facilitates upscaling of traits by other researchers and of adoption by farmers.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	enable partnerships with other CRPs, with recognition that not all trade-offs can be resolved.	
4. Even though the targets are overly optimistic for many CRPs, LIVESTOCK is an outlier in that some of the targets proposed (number of people likely to be lifted out of poverty, rate of yield increase) do not appear credible. These targets should be revisited or additional justification, grounded in empirical evidence, provided for the numbers quoted.	Overly ambitious targets recognized and IDO targets revised, with the methodology on how numbers were derived described. Sub-IDO level targets remain unchanged. The number for yield changes is much higher than crop CRPs because of greater potential in synergistic approach (combining genetics, feed and health). Feed and forage breeding at early stage, and significant increases possible before diminishing returns sets in.	**Partially addressed.** Additional explanations and calculations are welcome, but with implicit issues in assumptions on constraints to scaling for existing technical solutions (risk that the critical constraints are elsewhere or may not be addressed through research), and insufficient attention to rates of change in poverty (the expected decline in poverty over the six years has to be accounted for).
5. Include additional detail on the CRP's relationship with the private sector, and how this contributes to maximizing LIVESTOCK's comparative advantage.	A two-fold response: recognition that private sector is key to promoting business-based development models, and that engagement with the private sector will be framed by clear principles.	**Satisfactorily addressed.** Recognition that the private sector is a critical part of the livestock/ASF value chain is welcome. How such an engagement maximises CRP comparative advantage is worthy of monitoring over time.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Maize Agri-Food System (MAIZE) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A-

1. Summary

- The MAIZE CRP encompasses almost every relevant aspect of the maize agri-food system and the activities range from the development and delivery of germplasm to sustainable intensification and poverty reduction in maize-based agri-food systems in target areas. In addition, the proposed research effectively integrates relevant knowledge sharing and capacity building activities. The proposed activities are well-motivated on the basis of maize's importance as a staple in many parts of the developing world, and also on the basis of its importance as animal feed.
- MAIZE aims to increase the annual rate of yield increase by 1.2%, assist 7.5 million maize consumers and producers to exit poverty, help 5 million people out of hunger, help 15 million people consume biofortified maize, increase water- and/or nutrient-use efficiency through improved crop management practices in maize-based farming systems by 1%, and reduce GHG emissions from maize-based farming systems by 0.01 Gt CO_2eq/yr[2].
- The proposal credibly illustrates that there are scientific opportunities and viable technological approaches that can address some of the key challenges that confront maize farming in the developing world. The leadership track record is variable, with varying strengths across professional areas. The marketing and business analysis in the proposal is significantly weaker than the bioscience content.
- The articulation of MAIZE's comparative advantage and hence of its niche and regional foci is quite strong. MAIZE's partnership strategy benefits from strong CGIAR networking throughout the value chain and includes a broad range of actors in the public and private sectors as well as civil society.
- The structure of the CRP is well organized and conceptualized. It is based on five interconnected and complementary FPs. The CRP-level and FP-level ToC/impact pathways clearly link to the SRF and are logical, and investment in maize research should expand the performance and benefits derived from the maize agri-food system.
- Further development of the agri-food systems concept for MAIZE is still needed. For example, one weakness of the proposal is the lack of attention to the potentially important impacts of maize use as fuel on the design of the research strategy for this agri-food system.

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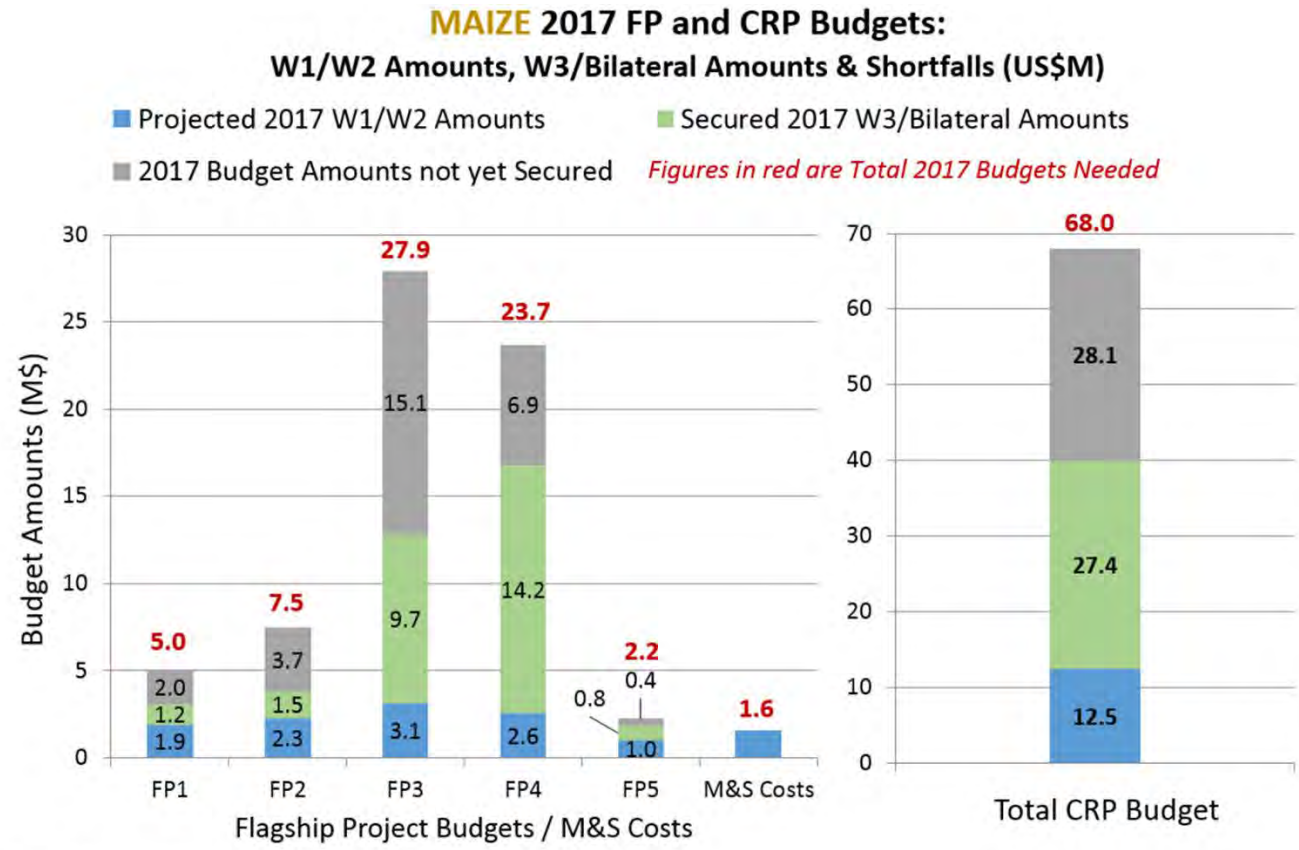
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

[2] The CRP targets have not been independently verified.



Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Enhancing MAIZE's R4D strategy for impact FP1 enhances MAIZE's R4D across all the FPs, informing strategies for impact through foresight and targeting, learning from adoption and impacts, strategic and transformative gender research, and identifying value chain opportunities.	• Explicit consideration of value chain opportunities rather than simply feeding in demand projections. • Clear comparative advantage; partners add value and enhance the probability of success. • Above average leadership track record, with high citation impact in social sciences.	• Little demonstrated capacity on prioritization (although there is new capacity on foresight and targeting that should be monitored). • Less than convincing quality of impact work, including CRP-level impact assessment.	Moderate
FP2: Novel diversity and tools for increasing genetic gains FP2 harnesses advances in science and new technologies to develop and validate maize-specific tools and to provide novel raw materials that are mainstreamed in FP3 to enhance breeding efficiency and germplasm enhancement.	• Potential to tap diversity for breeding new maize cultivars more efficiently. • Cutting-edge research resulting from science advances. • Solid past performance in this area, including high quality publication outputs.	• Prioritization based on likelihood of success needs strengthening.	Strong
FP3: Stress tolerant and nutritious maize FP3 uses outputs from FP2 to develop farmer and consumer demanded high yielding, stress tolerant, healthy, nutritious and market-responsive maize varieties that are targeted at region-specific needs of the poor.	• Target traits for breeding are related to a broad array of environmental stresses e.g. climate change/new pest outbreaks. • Science thoroughly detailed with high level of specificity. • Strong comparative advantage; broad range of partnerships, including appropriate public and private sector (particularly SMEs) actors to ensure the delivery of outputs at the country level.	• Need for clarity on the availability of a public database with yield data of the many multi-location trials conducted for transgenic maize under the WEMA project (monitoring needed to ensure that open access is made operational).	Strong

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Sustainable intensification of maize-based systems for improved smallholder livelihoods FP4 focuses on the sustainable intensification of maize-based farming systems. Besides utilizing outputs from FP1 and FP3, FP4 analyzes system diversity, dynamics and livelihoods strategies to further target and enhance the sustainability of MAIZE interventions.	• Team has good scientific credentials. • Sound research plan that is policy relevant; climate change well addressed. • High comparative advantage on innovating for complex targets.	• New design may not overcome shortcomings identified in Humid Tropics. • Inadequate recognition of existing trade-offs (not very many technologies that generate "wins" in all dimensions).	Moderate
FP5: Adding value for maize producers, processors and consumers FP5 assesses value-addition opportunities for maize producers, processors and consumers and has numerous implications for the societal grand challenges.	• Recognition of the increasing importance of maize-as-input vs. maize as food. • Acknowledgement in proposal addendum that feedback from this FP on traits for value addition to FPs 2 and 3 is crucial.	The ISPC recognizes that this is a new and important area of research. It recommends that this FP be viewed as a pilot project and calls the attention of the proponents to the following issues: • Clear criteria needed about which research activities should be expanded or curtailed, including risk analysis of potential failures. • Strategic design of the FP should be made more coherent. • Expertise necessary for research to support development of commercial activities is weak.	Weak

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. **Elaborate on the lessons learned from the Phase-I Humid Tropics (HT) CRP. The CRP should also provide further details on the research components and activities that are being absorbed into MAIZE from the Phase-I Humid Tropics CRP (predominantly in FP4)** Additional details on the lessons learned from the Phase-1 Humid-Tropics CRP should be included in the addendum. ……more clarity is needed on the lessons learnt from the Humid Tropics CRP as well as the components of that CRP that will be integrated into MAIZE. These should be provided in the addendum.	The MAIZE addendum lists 6 lessons learnt from both HT and MAIZE v1 on integrated systems research (ISR), illustrating the challenges for fully implementing it. The proponents also note how MAIZE v2 embeds some of these lessons, particularly in its FP 4 on sustainable intensification.	**Satisfactorily addressed.** The addendum displays exemplary candor on the shortcomings of the HT systems approach. With due credit for acknowledging these shortcomings, it also must be observed that these "lessons learned" from HT are not in fact new but rather these pitfalls and costly lessons of experience by-and-large are well established in the rural development literature going back some years. Thus, it cannot be taken for granted that the new design will embrace and overcome these shortcoming in practice. These questions deserve particular attention in CRP MAIZE Phase II activities going forward. Moreover, the claim that "*stakeholder demands are not necessarily aligned with what CGIAR centers can supply, especially given limited capacity to work on policy and market innovation at the institutional level (e.g. land tenure, service provision)*" does not seem an acceptable "lesson learned". The ISPC hopes that going forward, these gaps are filled by stronger partnership with PIM.
2. **Address whether major changes will be seen in competing uses of maize, e.g. for biofuels as well the corresponding implications for the design of the MAIZE program** Further effort is warranted in examining various scenarios of maize use for biofuels and its implications for the design of the	The addendum states "*MAIZE specifically targets resource-poor smallholders in regions where the biofuel industry is not expected to develop in the near term. Similarly, value creation of maize for biofuel is not likely to improve the livelihoods of most target beneficiaries in the near future.*"	**Partially addressed.** The multi-market nature of maize requires structured multi-market analysis in order to credibly understand possible cross-market effects, e.g. among maize for food, feed, fuel or feedstock among other uses. The rationale in the addendum for ignoring linkages to biofuel markets, which after all are at least

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
MAIZE program and this should be included in the addendum.	The proponents further note that "*CoA 1.4 is set to analyse major drivers and modifiers of the maize supply-demand nexus within an agri-food systems context*".	partially integrated globally, is not convincingly written. The addendum provides no evidence that these multi-market effects – indispensable to an agri-food systems approach – have been taken seriously by the proponents. Expertise in these areas exists within the CGIAR (e.g. IFPRI), so perhaps collaboration with PIM would be an effective way to develop this analysis in a timely fashion.
3. **A stronger case for the CRP's comparative advantage for the planned work is needed. There is still not sufficient justification of comparative advantage of the CRP relative to the private sector.** There is indeed little discussion of the comparative advantage of the CRP relative to the private sector.	The proponents refer to both Table 1.6 and Annex 3.12 in the original proposal for showing the CRP's comparative advantage vis-à-vis the private sector. It is further elaborated in the addendum that "*MAIZE does not seek to compete with the private sector, but to complement and enable the development of a sustainable, thriving seed sector that can perpetually re-invest in maize improvement in target regions*." Likewise, as noted in the addendum, "*The private sector uses science primarily for generating profit; MAIZE uses science for generating impact in partnership with the private sector. The two are complementary and not necessarily antagonistic*."	**Satisfactorily addressed.** MAIZE targets various environments in Africa, Asia and Latin America (about 40-50% of them) that large-scale (multinational) private sector does not show interest in, due to specific cultivar traits and small market size and where farmers do not have adequate access to improved maize seed. Herein MAIZE provides its SME partners with bred-germplasm and capacity development. The articulation of MAIZE's comparative advantage and hence its niche and regional foci is quite strong. The CRP's comparative advantage regarding multinational private sector could be further elaborated through reliable maize data and thorough analysis on this statement included by the proponents in the addendum (and quoting from Excellence in Breeding proposal): "*private sector breeding investment in low and lower-middle income countries is no more than 5% of the breeding investments done in upper-middle and high*

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
		income countries, yet it is where almost half of the area of CGIAR mandate crops is."
4. **Elaboration of the plans for collaboration with other CRPs – particularly AFS CRPs is needed** In this proposal, MAIZE provides even less information on plans for collaboration and has not responded to the ISPC request to specify linkages with other CRPs in its program and FP impact pathways. This should be provided in the addendum.	The addendum indicates that MAIZE v2 will collaborate with all the AFS CRPs, except for FISH. For further details the proponents refer to subsections 1.7 and 2.7 plus Annex 3.2 and Annex 3.7. The proponents have revised the FP-level impact pathways highlighting the linkages with other CRPs and platforms.	**Satisfactorily addressed.** The ISPC notes that collaboration between MAIZE and other AFS CRPs will be expanded in MAIZE v2. Priority is given to work on pre-breeding tools, models and methods; sustainable intensification; and value addition. These plans are articulated clearly and concisely in the addendum, but still appear to be aspirational. As probably is true for all of the Phase II CRPs, the actual development of these partnerships and collaborative efforts deserves ongoing MELIA attention.
5. **Provide an indication of how the work on value addition (FP5) will be used to prioritize breeding objectives. FP5 needs to show more alignment and integration with FPs 2 3, and 4.** In that sense, it would be important for this FP to show more alignment and integration with FP2 and FP3, as well as with FP4, together with more evidence that FPs 2 and 3 understand the need to target the traits identified here.	The proponents indicate in the addendum that FP5 "*is a strategic interface linking identified market opportunities with technology development and its beneficiaries – and all the associated fine-tuning and feedback loops.*" It is further stated that "*work on maize value-addition (FP5) will benefit from pre-breeding and breeding work undertaken under FP2 and FP3, respectively. FP5 will also provide feedback to prioritize traits relevant for value-addition*" and some examples are given.	**Satisfactorily addressed.** However, the meaning of the claim that FP5 "*is a strategic interface……and its beneficiaries….*" remains unclear.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Rice Agri-Food System (RICE) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A

1. Summary

- RICE builds on the GRiSP CRP to address the issue of improving rice agri-food systems across the developing world. It maintains a large emphasis on genetic improvement while making the case, through its foresight studies, of a broadening of the CRP to an "agri-food system". The research activities of RICE range from upstream/basic research to plant level research (variety selection), through to the delivery of new varieties and management practices to the end users, including farmers and processors of rice.
- The CRP aims to increase the annual rate of yield increase in rice to at least 1.3%, help at least 13 million rice consumers and producers to exit poverty, assist at least 17 million people out of hunger, assist at least 8 million people to meet their daily Zn requirements, increase water- and nutrient-use efficiency in rice-based farming systems by at least 5% and help reduce agriculture-related GHG emissions in rice-based farming systems by at least 28.4 Mt CO_2eq/yr[2].
- RICE with its institutional base in the six co-ordinating centers - IRRI, AfricaRice, and CIAT as well as CIRAD, IRD, and JIRCAS (all with a strong history in international rice research) - together with its strategic partner base, has a clear comparative advantage as a global leader in areas of rice research. The CRP's effective partnership strategy provides enhanced possibilities to bring together international efforts to complement existing CGIAR strengths.
- RICE has an experienced and highly competent leadership team. The CRP has recognized some deficiencies in social science research highlighted by the IEA evaluation as well as ISPC commentaries and has begun addressing interdisciplinary concerns. It will require special fostering by the leadership of RICE to ensure this interdisciplinary activity takes place across the FPs.
- The proposal presents a coherent set of integrated flagships. The rationale and activities of each FP fill a relevant gap in the research agenda. Overall RICE offers a scientifically rigorous case to deliver measurable impacts on the SLOs.
- RICE has embraced innovative and forward looking thinking in developing the CRP, and therefore it is at the forefront of CGIAR science.

[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
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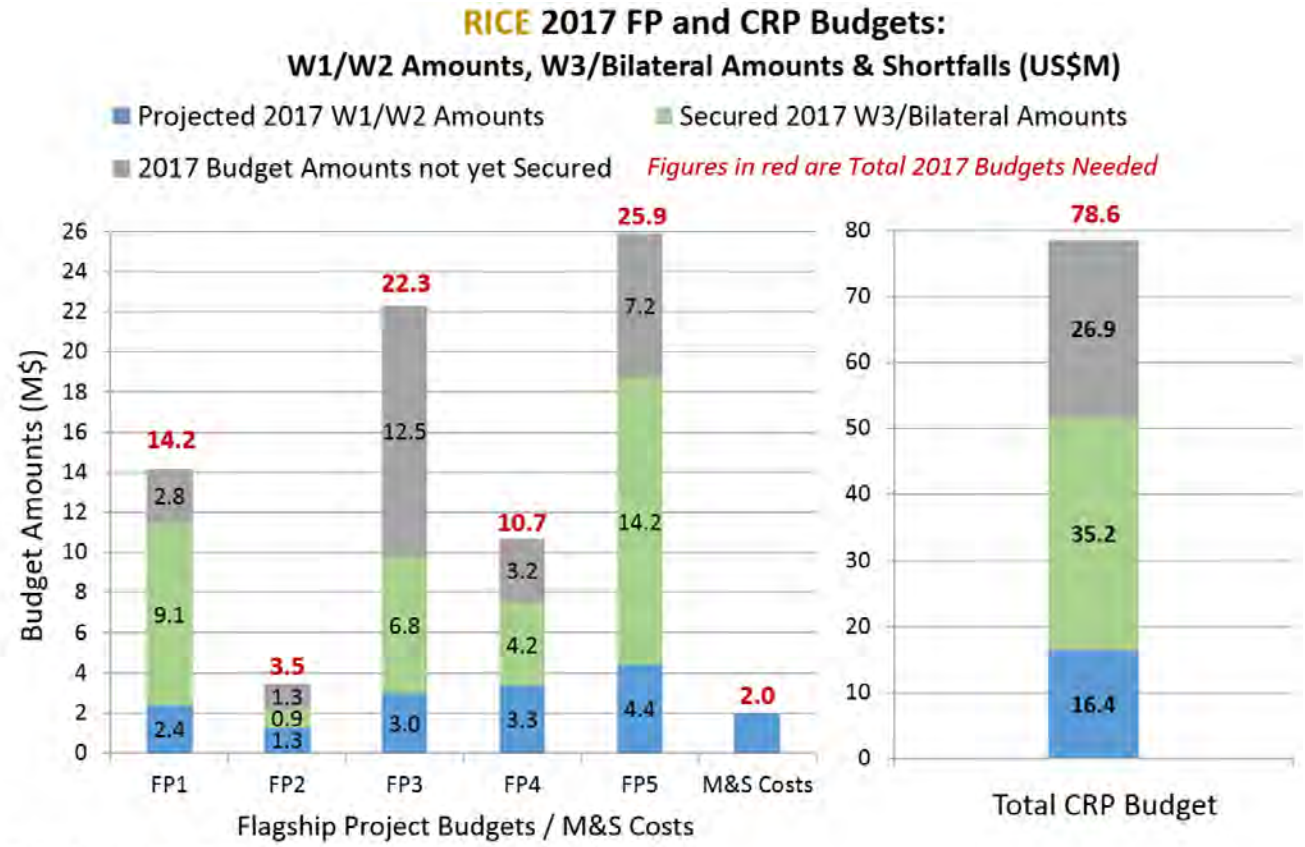
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

[2] The CRP targets have not been independently verified.



Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Accelerating impact and equity FP1 provides an over-arching framework for guiding the other 4 FPs with a major focus on enhancing capacity development and inclusion of gender and youth.	• Sound priority-setting framework in place; impact pathways both for the FP and the scaling out (CoA 1.3) well thought out. • Strong comparative advantage (no other organization concerned with the scope of global rice science). • Integration (at the farming system level) of gender issues with biophysical processes, is unique and novel.	• Given the focus on gender/youth issues as related to poverty alleviation, specifics on how progress on youth and gender will be quantified are needed. • Overall delivery will depend on partnership beyond the RICE CRP.	Strong
FP2: Upgrading rice value chains The main objective of FP2 is research aimed at improving and upgrading rice value chains.	• Logical ToC/impact pathway that is well aligned with the SRF and clearly identifies the changes needed to improve the value chain. • Attention to demand-side issues; emphasis on post-harvest processes to reduce poverty has a degree of novelty. • Significant comparative advantage; range of internal and external partners with relevant knowledge and expertise.	• Modest collaboration with private rice companies in developed countries that are already exploring the feasibility and demand of rice byproducts. • Risk that favorable policies, including access to financial services, may have to be in place before new uses of rice by-products can be commercialized.	Moderate
FP3: Sustainable farming systems The FP3 research program considers rice within the broader context of farming systems with a strong focus on diversification strategies.	• Strong social science component. • Emphasis on whole farming systems (with increase in farm diversification) and climate change mitigation. • Strong partnership program in place among CGIAR Centers, NARES, ARIs, etc.	• Assumption that diversification consistently leads to increases in income is questionable. • Difficult to identify global public goods (factors that drive success in diversification are local in nature).	Moderate

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Global Rice Array FP4 focusses on setting up a worldwide field laboratory to facilitate rice breeding programs, and provides inputs to FP3 and FP5.	• Potential to speed up the release of new rice cultivars that are better adapted to the environment, including changes induced by climate change; ample opportunities to contribute global public goods in phenomics, genomics and bioinformatics. • Extensive and global partnerships. • Well-qualified team of scientists with expertise in relevant areas and recognized track records.	• TOC/impact pathway does not clearly articulate the interaction between FP4 and FPs 3 and 5. • Success of this project hinges upon generating high quality phenomic information (risk).	Strong
FP5: New rice varieties FP5 focusses on breeding improved rice varieties, drawing on results and inputs from all other FPs.	• Uses an array of advanced modern tools; builds on successful GRiSP participatory approaches for varietal selection and innovative seed systems (e.g. sub 1). • Strong established partnerships which enable the complexity of traits to be prioritized on a regional basis. • Very strong team of researchers with successful track records.	• Feasibility of delivery of C4 rice during the lifetime of the CRP (a blue-sky research project; high risk, high return)? • FP outcomes are dependent on resources from outside partners and thus it will not be possible to attribute impacts to CGIAR.	Strong

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. **Indicate how a priority-setting process will be incorporated into the CRP rationale and can contribute to maintaining a focused research program even as boundaries expand.** Under such large financial changes, greater clarity on how the results of the priority setting analysis were used to determine which research activities were excluded should be included in the addendum.	The CRP has acknowledged that priority setting is a continuous process that takes into account scientific breakthroughs and evidence, impact results, foresight, engagement with stakeholders, etc. The proponents have presented a 3-step framework illustrating the priority setting process. Table 1 gives examples of how the priority setting framework is used to exclude activities including hybrid rice and the reasons derived from the framework for their exclusion.	**Satisfactorily addressed.** The commitment to revisit priorities when funding scenarios change is welcome and the examples given in Table 1 are a useful illustration. The proponents recognize the importance of prioritization not just for setting research priorities and budgetary allocations but also to exclude research activities for enhancing CRP coherence, efficiency and effectives.
2. **Revisit the feasibility of meeting planned targets for the FPs given budget constraints, using the priority setting exercise to reduce the number of activities/outputs where needed.** The question arises as to whether this budget is realistic for what is being proposed. It remains to be seen if all the activities, outcomes and deliveries can be carried out with the proposed budget. As with FP1, revisiting the feasibility of delivering planned outputs with the budget allocated is recommended. After six years, can RICE realistically expect to make a significant contribution in all the planned areas?	RICE is confident that the proposed outputs are realistically achievable within the budget. The proponents have described the processes to develop their targets, under three possible budget scenarios, with the proposal presenting details for the medium funding level. Additional clarifications are provided to further strengthen their case that the proposed outputs and outcomes are feasible. RICE also includes the following in support "*the three non-CGIAR centers (Cirad, IRD, and JIRCAS) contribute their own rice programs and activities to RICE, though this is not specified in monetary terms. For example, Cirad employs around 60 scientists involved in rice research, IRD around 25–30, and JIRCAS over 20.*"	**Satisfactorily addressed.** The challenge the proponents will have here is one of attribution and contribution. The leveraging of resources is creditable, but the CGIAR (and donor funding) cannot take credit for all the promised impact.
3. **Provide a strategic analysis of focus areas for FP5 based on opportunities to generate public goods. Since the pre-**	RICE has clarified that while some traits such as high yield and specific major biotic stresses are common to all continents, other target traits are specific to regions.	**Satisfactorily addressed.**

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
proposal, the mention of hybrid rice activities in FP5 has been dropped. Is this intentional or an inadvertent omission? The question needs to be posed, even with such a large team of researchers, how feasible is it to address in depth such a large range of variables in a breeding program? Does an effective plant selection program need to be more focused and can RICE select for it all? Surprisingly, compared to the pre-proposal, the RICE full proposal does not mention any activity related to hybrid rice.	An example of a product profile with priority traits for the rainfed lowlands of Vietnam is presented as an example (Table 3). RICE maintains that its comparative advantage is the production of breeding tools and genetic diversity that have global reach; and, provision of leadership. Hybrid rice is dropped from RICE intentionally because hybrid rice activities are now fully funded by the rice industry through two hybrid rice consortia. RICE, however, will continue to interact with these entities.	The proponents provide a well-articulated statement of RICE's comparative advantage and of the advanced nature of this CRP. The exclusion of certain research activities (for example hybrid rice) further indicates that the CRP is exemplary in understanding its comparative advantage and focusing on research activities with greater likelihood for success.
4. **Clarify and provide some classification of how RICE plans to manage the approximately 900 partners at different activity and thematic levels/geographic locations.** A clearer elaboration of how the 900 partnerships are managed and what the decision making structures are at the different activity and thematic levels/geographic locations would be very useful.	A link to the GRiSP Partnership Strategy is provided. Three regional mechanisms for partner coordination (CORRA, FLAR and CARD) are highlighted.	**Satisfactorily addressed.** The ISPC recognizes that RICE has a very comprehensive Partnership Strategy. Annex 2 and the GRiSP Strategy provide details on the partnership (the 'P' in GRiSP) in ~ 30 pages.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Roots, Tubers and Bananas (RTB) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A

1. Summary

- The CRP on Roots, Tubers and Bananas focuses on improving the production, marketing and consumption of a set of vegetatively propagated staple crops: cassava, potato, sweet potato, yam and banana. The CRP aims to assist 20 million people to increase their income; 30,000 small and medium-sized enterprises to operate profitably in the RTB seed and processing sector; 8 million households to have high yields of RTB crops through the adoption of improved varieties and sustainable management practices, with 1.9 million ha converted to sustainable cropping systems; and 10 million people to improve diet quality[2].
- RTB crops are linked by a number of common challenges at the stages of breeding, seed systems, and post-harvest and yet (with the exception of potato) are the subject of only limited research investments in the United States and Europe. The CRP has five highly inter-dependent and complementary Flagship Projects.
- This is a well-developed CRP with a track record of strong and competent leadership. The quality of research in the first phase has often been excellent. The CRP is organized as an "alliance" of the four CGIAR centers with research mandates for these crops (CIP, IITA, CIAT, Bioversity) along with CIRAD.
- The alignment with the SRF is strong and plausible, with clear and focused differentiation of how the FPs are expected to contribute to sub-IDOs. The CRP is not trying to tackle everything, and within each crop, the research priorities have been rigorously and systematically identified.
- The feasibility of significant impacts on poverty or natural resources for RTB is limited by the often small share in total agricultural income from these crops in most smallholder contexts. Furthermore, a significant underlying challenge facing the CRP – and one that can limit impact prospects – is the relatively undeveloped seed sector for vegetatively propagated crops in most countries. Seed systems research features in the CRP Phase II, but this may well be an insufficient contribution to materially change the challenging conditions that provide poor incentives for private sector investment.
- RTB has embraced innovative and forward-looking thinking in developing the CRP. A strong case for feasible delivery for a number of the targets in the CRP has been made, reflecting a commitment to impact assessment of adoption processes. The link between research outcomes (adoption) to development outcomes is particularly strong in research on orange-fleshed sweet potato and biofortified cassava.

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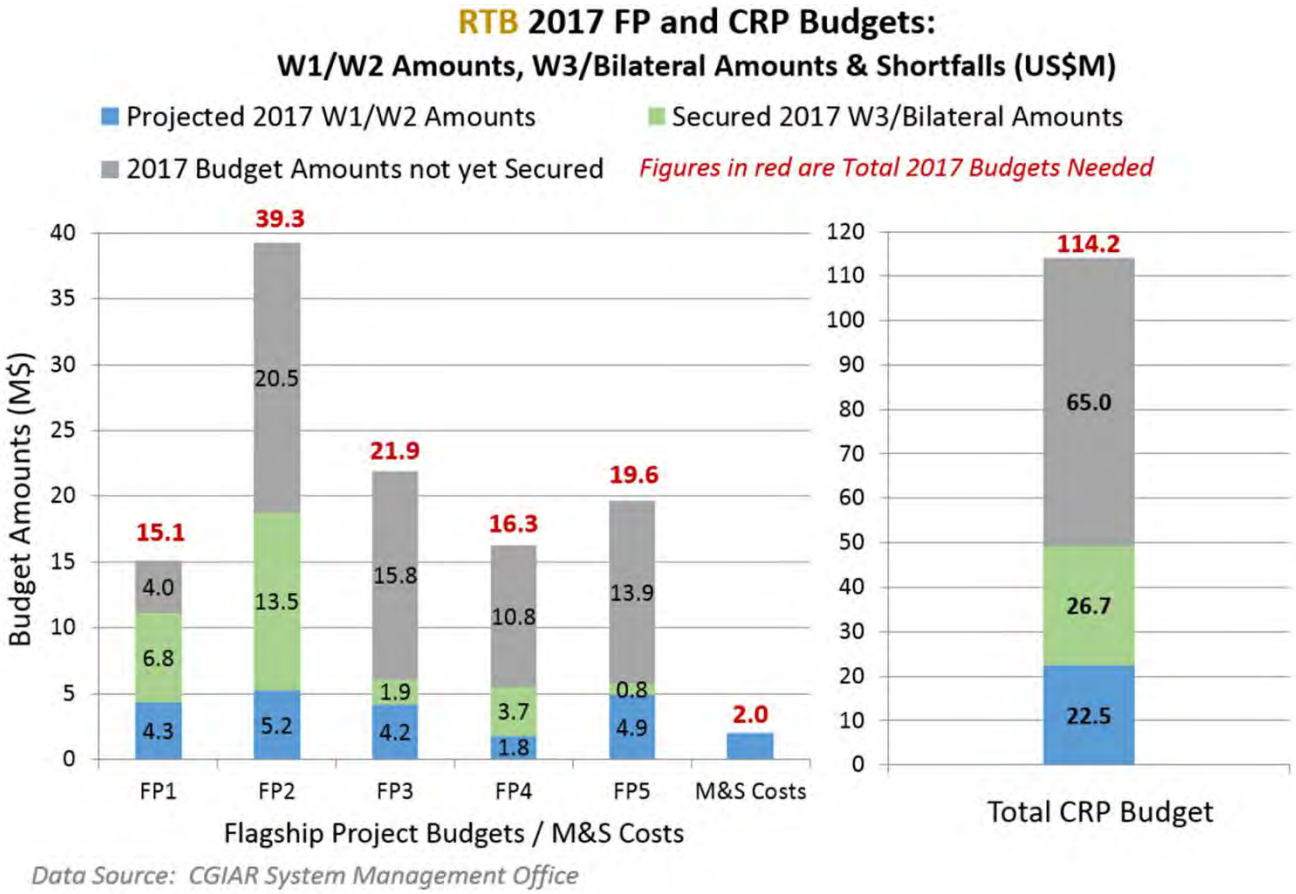
RTB 2017 FP and CRP Budgets:
W1/W2 Amounts, W3/Bilateral Amounts & Shortfalls (US$M)
Projected 2017 W1/W2 Amounts
Secured 2017 W3/Bilateral Amounts
2017 Budget Amounts not yet Secured
Figures in red are Total 2017 Budgets Needed
Budget Amounts (M$)
40
35
30
25
20
15
10
5
0
39.3
20.5
21.9
15.8
19.6
13.9
15.1
4.0
16.3
10.8
6.8
13.5
1.9
3.7
0.8
4.3
5.2
4.2
1.8
4.9
2.0
FP1
FP2
FP3
FP4
FP5
M&S Costs
Flagship Project Budgets / M&S Costs
120
110
100
90
80
70
60
50
40
30
20
10
0
114.2
65.0
26.7
22.5
Total CRP Budget
Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Enhanced genetic resources A "discovery" FP, comprising frontier science on breeding, transgenic varieties and in-situ conservation of genetic resources, supported by a breeding community of practice (CoP), that aims to deliver molecular and genomics tools for more precise trait selection in breeding.	• Central to the success of the CRP as it provides the links to the underlying frontier research on which delivery is based. • Comparative advantage: well-established for next generation breeding and game-changing traits. • Likely to succeed based on rigorous prioritization and strong management.	• Need to ensure that the feedback loop on which varieties are being adopted and why is continued.	Strong
FP2: Productive varieties and quality seed One of three "delivery" FPs, containing the core breeding programs for each of the mandate crops (CoAs 2.2 – 2.7), as well as cross-cutting work on seed systems (CoA 2.1), that aims to deliver the new traits that farmers are looking for, via functioning seed systems.	• Socioeconomic analysis on seed systems (CoA 2.1) addresses a critical issue that limits impacts from investments in breeding. The other clusters are the core breeding programs for each of the mandate crops. • Strong comparative advantage for the breeding program clusters, • Commitment to DNA fingerprinting of varietal adoption is welcome and indicative of genuine curiosity about impact.	• Continuing challenge of private sector investment in seed sector for these crops.	Strong
FP3: Resilient RTB crops One of three "delivery" FPs, focused on closing yield gaps for RTB crops in target countries through new tools and practices for managing pests and diseases (CoAs 3.1, 3.3 – 3.6) and improved production systems (CoAs 3.2).	• Biotic and abiotic constraints are major factor in lowering yields of RTB crops, and climate change is making the challenge more difficult. • Comparative advantage supported by strong track record and relevant expertise across the participating Centers.	• Insufficient recognition in proposal of importance of soil fertility and agronomy to the success of this flagship.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Nutritious RTB food and value-added through post-harvest innovation One of three "delivery" FPs, focused on increasing the role of specific RTB crops (particularly cassava and sweet potato) in diets, and as a source of income, through research on food processing, markets and policies.	• Strong comparative advantage related to ability to close loop from knowledge of post-harvest issues and consumer preferences back to breeding program (FP2). • Strong track record of delivery as evident from recent award of the World Food Prize. • Comparative work across value-chains, and focus on lesson-learning suggest a pragmatic approach.	• Challenge of attempting to influence trends in consumer perceptions regarding RTB crops, mitigated by strong partnership strategy.	Strong
FP5: Improved livelihoods at scale A cross-cutting FP aiming to support the scale-up of outputs from the other FPs via improved decision-making by a range of actors, resulting from evidence from: impact assessments, foresight, modelling, and gender and systems research.	• Recognition of trends in consumption of RTB crops. • Links being made with other partners, commitment to continual improvement.	• The track record on systems research is weak. • Risk of missing International Public Goods.	Moderate

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. Propose actions to reduce risks related to science quality, and particularly the high proportion of journal articles published in journals without an impact factor, both in terms of understanding how this came about and what will be done to resolve the problem. Major journals may be less interested in RTB crops than the major cereals, making high-impact publication less likely, but this does not address the central concern about why a significant proportion of CRP output is in journals without an impact factor. The risk management section on page 32 is largely focused on partnerships, but there could be some significant risks regarding the quality of science.	The proponents refer to the IEA Evaluation report which had made the same point, and explains again the nature of the science and why there have been fewer papers published in journals with an impact factor. The proponents also outline how the individual Centers are seeking to incentivize their researchers to publish in journals with higher impact factors.	**Satisfactorily addressed.** The need to publish in journals appropriate to the target audience for the research is recognized. The work being done by RTB and individual Centers to establish a culture which incentivizes publication in journals with an impact factor is welcomed. The RTB proponents have shown that they recognize the risks, but there is more that could and should be done to ensure high quality outputs. For example, project proposals for research to be funded through the CRP could stipulate the expected publication outputs.
2. Clarify the fate of research on pests and disease management of potato and sweet potato	The response highlights examples of pest and disease management research which is integrated within crop-specific clusters.	**Satisfactorily addressed.**
3. Respond to suggestions that CC3.2 on crop production systems would be better placed in FP5 and provide further details on the budget for this cluster of activity CC3.2 on crop production systems might be better placed in FP5 where collaboration in benchmark sites appears to be a prerequisite for its effectiveness. Presently, CC3.2 does not contribute to RTB outcomes in the second column of Table FP 3.2... Transfer of CC3.2 would give FP5 some definition, which is currently lacking in the full proposal.	The proponents justify retention of cluster CC3.2 in FP3. The argument made for this is based on their description of FP3 as being largely focused on production issues (i.e. supply of RTB crops) with research at the plot and field scale, whereas FP5 is organized around demand for RTB crops at the household, landscape and value chain levels. The W1&2 budget request is for $0.56 million.	**Satisfactorily addressed.** RTB management are best placed to know how different clusters can be integrated. However, part of the ISPC concern related to the lack of an explicit contribution from CC3.2 to outcomes, and this point has not been addressed.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
4. **Clarify a number of points highlighted in the comments on FP4 to understand the evidence base for expectations of future impact from bio-fortified cassava and sweet potato, in particular**: *i. 10 million people with significantly improved diet quality* *ii. Evidence of the link between increased consumption of bio-fortified cassava and the incidence of vitamin A deficiency in children, and whether the evidence is as well-established as it was for OFSP at a similar stage in the "scaling" process* *iii. The adoption level of OFSP of 1.3 million households in 10 countries in Africa since 2010* *iv. The idea that researchers can influence consumers to pay a premium for nutritious (bio-fortified) varieties (as described on p. 100), requires several leaps of logic.* *v. Why get bio- fortified materials out to farm households in 20 African countries when the uptake of OFSP in Uganda and Mozambique… was as much as 80% below expectation?* vi. *How does scaling up of OFSP in the CRP on RTB differ from scaling up proposed in A4NH?*	The response provides references as evidence in support of the six sub-points identified in column 1. The only change to the main text of the proposal was to 'correct' the number of households which had adopted improved sweet potato planting material from 1.3 million to 1.7 million. The evidence presented as a rebuttal of the various critical points includes: Data on increased vitamin A intake from OFSP intervention programs in Mozambique (addressing *i*) Preliminary results from a Nigerian trial on acceptance of yellow cassava showed a positive consumer response to knowledge of the nutritional benefits of yellow cassava *(i, ii, iv, v)* Updated figures on adoption of improved sweet potato planting material and plans for enhancing distribution *(i, iii)* Emerging evidence from Rwanda on the emergence of a price premium for OFSP *(iv)* A defence of uptake in Uganda and Mozambique along with a reminder of the 'challenges of working with a clonally propagated crop' being disseminated through an 'underdeveloped seed sector' *(v)* Examples of cross-program learning between RTB and A4NH and other programs. *(vi)*	**Satisfactorily addressed.** The ISPC does not doubt the potential value of biofortified crops to improving nutrition, and the evidence for expected efficacy of RTB research (in going from research outcomes and intermediate development outcomes) compares favourably to other CRPs. However, the evidence presented does not convince that RTB-funded research will benefit 10 million people with 'improved diet quality'. ISPC is not asking for further changes to the proposal (or targets) but wishes to emphasize the importance of critical research-oriented monitoring and evaluation that can contribute to System-wide learning on what are the most effective impact pathways towards System-Level Outcome 2 (Food and Nutrition Security) in different contexts. Confidence that this will happen is strengthened on the basis of the rewriting of FP5.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
5. Address remaining concerns regarding the content of FP5, particularly clusters of activity 5.2 and 5.4, through a detailed management response in the addendum. *The clusters on Sustainable Intensification and Diversification (CC5.2) and on Institutional Innovation and Scaling (CC5.4) are problematic and likely represent low pay-off investments. The arguments are unpersuasive and not cogently presented, and the outputs are highly speculative and ill-defined.* *The absence of clarity in clusters CC 5.2 and 5.4 is communicated by the proposal for a competitive grants project that could elicit system-wide support to participate in seemingly priority projects related to RTB. Proposing illustrative research projects many years into the CRP's lifespan is an admission of mental fuzziness, at best.* *Research on extension and technology transfer has to be carried out in a manner that provides insights that can potentially be generalized to other contexts (i.e. rigorous, experimental examination of alternative mechanisms)… FP4 already contains a rich stock of experience in this area.*	Clusters 5.2 and 5.4 have been substantially reframed. CC5.2 now focuses more on delivery of outcomes, by identifying entry points associated with RTB innovations. The research products are envisaged to be evidence-based options – the critical issue being the kind of evidence that will be generated. CC5.4 now builds much more on lessons which can be learned (with respect to RTB) from the approaches adopted by others for scaling. The proposed use of social networking analysis is welcomed as is the explicit recognition of the importance of capacity development. The scope of the competitive grants scheme has been made clearer through a change of title and a greater emphasis on scaling. A greater emphasis on learning lessons from earlier RTB experience is clarified in relation to extension and technology transfer.	**Satisfactorily addressed.** The arguments are more persuasive and more strategically focused on enhancing the delivery of RTB. ISPC comments on the Competitive Grant fund reflect the context of the start of Phase II. The change of title and tighter specification is welcomed. ISPC comments on extension and technology transfer research were pushing for more focus on production of international Public Goods. This is recognized in the final sentence on p 17 of the Addendum.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Wheat Agri-Food System (WHEAT) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A-

1. Summary

- The CRP aims to increase the annual rate of yield increase in wheat to at least 1.4%, help at least 5.7 million wheat consumers and producers to exit poverty, assist at least 10 million people meeting their minimum dietary energy requirements and help reduce GHG emissions related to wheat-based production systems by 5% compared with a business as usual scenario. According to the proposal, the global demand for wheat is expected to increase by 1.4% per year to 2030 and to avoid price increases, yield growth rates must increase by 40%. The proposal highlights the central role wheat plays in food and income security in many low and middle income countries, and provides a clear, persuasive and evidence-based argument that the WHEAT CRP will help smallholders make the best use of their available resources under increasingly challenging conditions and contribute significantly to delivery of the CGIAR outcomes at the system level[2].
- Overall the leadership team has good track record. The CRP Director brings extensive experience in wheat improvement and management. The background, skills base and caliber of the people listed in the management structure are somewhat variable.
- WHEAT presents a convincing argument for continued investment in the CRP based on historical performance, as well as demonstrated comparative advantage in crop improvement research. The proposal articulates how WHEAT will contribute to delivery of the CGIAR objectives.
- The role of WHEAT in shaping the international wheat research agenda is a critical aspect of the strategic relevance of the CRP, since it helps harness international activities, particularly from advanced research institutions to the WHEAT research agenda. The proposal is showing progress in capturing this potential for developing a coherent R4D strategy.
- The WHEAT impact pathways and theories of change were developed through a participatory approach, to ensure a shared understanding of the processes and frameworks for developing TOC and IP. However, the overall TOC/impact pathway still lacks detail on key aspects to achieving success such as boundary partners/next users, links to other CGIAR partners, and how WHEAT will provide implementation support for reaching the target R&D outcomes.
- Overall the WHEAT CRP has great strategic relevance and potential for delivery, with a need for further adjustment and strengthening of the program ToC and IP towards a well-integrated AFS framework.

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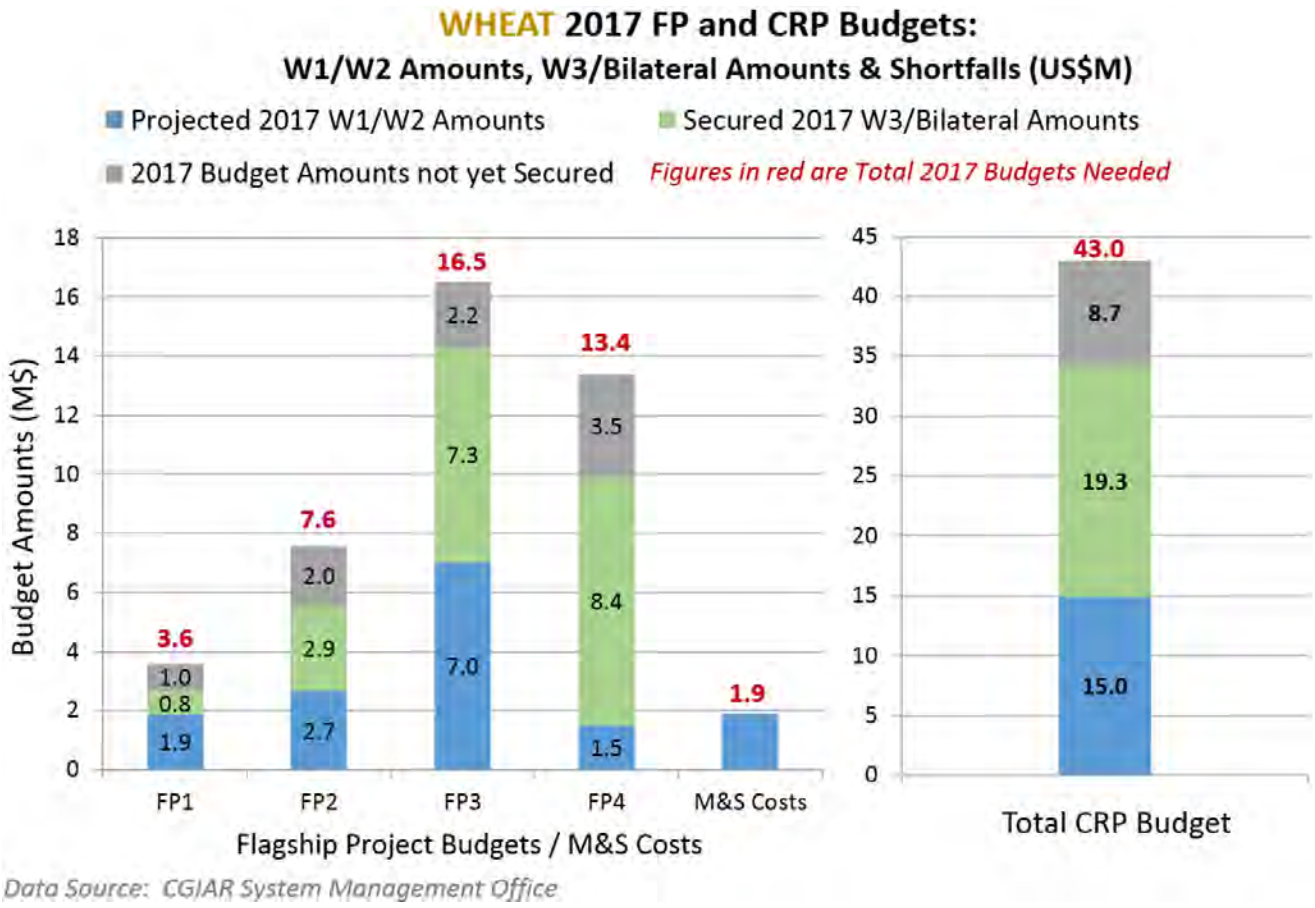

Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Enhancing WHEAT's R4D strategy for impact FP1 aims at integrating socio_economic research with germplasm improvement, agronomy and value addition to prioritize, target, understand, measure, and enhance WHEAT interventions for greatest impact in a complex agri-food system.	• FP designed to provide strategic guidance to WHEAT and support the internal coherence among all FPs. • Clear comparative advantage and strong partnership in place. • Strong focus on the gender, youth and capacity development strategies of the CRP.	• Need for stronger integration into the other FP research agendas. • Future plans for strengthening impact orientation /pathways of other FPs need to be monitored. • Lack of clarity of the alignment of the research questions and the expected outputs with national SDGs and regional priorities and initiatives.	Moderate
FP2: Novel diversity and tools for improving genetic gains and breeding efficiency FP2 is the home for most the upstream research undertaken by the CRP. The overarching objective of the research and activities undertaken is to 'validate and make available germplasm, tools and methods to enhance the efficiency and rate of genetic gains in breeding programs (globally)'.	• Clear and convincing TOC with a good balance between developing new germplasm resources, pre-breeding capabilities and developing partnerships to access new capabilities. • Diverse range of technologies which mitigates the risks associated with any single technology. • Strong leadership team with above average track record.	• A possible weakness about monitoring and evaluation of progress along the impact pathway relates to the capacity building interventions and outputs, as there is no corresponding R&D outcome to provide a measure of success.	Strong
FP3: Better varieties reach farmers faster The primary focus of FP3 is to build on the research outputs produced in FP2 and develop high yielding, stress tolerant and nutritious wheat germplasm that can be delivered to farmers in the shortest time possible.	• Clear comparative advantage in germplasm, breeding and phenotyping capabilities. • Strong FP leadership with good track records in managing complex science programs and expertise in interacting with end users and partners. • FP3 builds strongly on Phase 1, with expansion of the work on nutrition,	• Given the critical importance of seed production systems to the impact pathway of the CRP, the section describing the work is relatively weak. • A rigorous process in determining priorities is essential and a clear definition of the capacity for CRP to screen and analyse candidate genes is	Strong

FP	Main strengths	Weaknesses/Risks	Rating
	processing quality and health activities and some of the molecular breeding technologies.	needed. Some research activities in FP3 could potentially be hosted in FP2. • Variability in quality and strength of delivery partners across the target regions.	
FP4: Sustainable intensification of wheat-based farming systems The overarching aim of FP4 is to develop and scale-out technologies, management practices, and agricultural innovation systems that will enable farmers to sustainably improve their livelihoods from wheat-based farming systems.	• Recognition of the importance of value chain opportunities and constraints. • Strong comparative advantage associated with access/ability to undertake research in a wide range of agro-ecologies. • Experienced leaders with good track records.	• Lack of clarity on the lessons and elements from the Dryland Systems CRP to be considered by WHEAT. • Lack of strategies for addressing the challenge of enhancing adoption rates of improved crop management. • No explicit recognition of the need to account for potential unintended consequences on SLOs that are not the primary focus of the research.	Moderate

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. Articulate a coherent concept of the wheat "agri-food system" and how the concept affects the WHEAT R4D strategy.	The CRP provided clarification bullet points that include the importance of wheat in countries with the largest smallholders, how important wheat will be in the next 30 years in drier, rainfed and irrigated areas; and FAO definition of AFS.	**Partially addressed.** The responses provided by WHEAT still do not articulate properly how the AFS concept will be understood and implemented by the CRP. The ISPC also recognizes that this may be the case for most AFS CRPs in varying degrees; CRP proponents should work collectively over the course of Phase II, to develop the AFS concept in the context of CGIAR R4D.
2. Provide greater detail on the overall Theory of Change and Impact Pathway on boundary partners, next users, links to other CGIAR partners, and how the CRP will provide implementation support and scale up. The connection between FPs should be strengthened, to illustrate how FPs feed into each other within the TOC.	WHEAT is unsure what level of detail the ISPC is expecting: A list of boundary partners per country, their expectations and how to engage them? Note that the FP's impact pathways and theories of change mention generic boundary partners (e.g. FP3, on Doc p.104: Food processors and producers, extension partners, seed producers, farmer organizations). WHEAT also notes that the commentary on MAIZE did not come to same conclusions, though the level of detail provided is identical to WHEAT.	**Partially addressed.** The overall TOC/impact pathway still lacks detail on key aspects to achieving success, and how WHEAT is planning to integrate all its FPs and using its strategic partnerships towards reaching the target R4D outcomes of the CRP.
3. Provide a clear response to the ISPC request for "more clarity and details on the components of the Drylands Systems CRP that will be integrated into WHEAT and how this will be implemented".	WHEAT will integrate Dryland Systems 'action sites' located in North Africa, West and Central Asia. Proponents describe integrated systems approaches on pp.19, 130-131 (FP4 key research questions, lessons Learnt from Dryland Systems research), 132-136 (FP4 clusters with their landscape- and farm-level interventions; "*DS will bring to WHEAT FP4 a web-based GIS options by context decision support tool on sustainable intensification and management*".	**Partially addressed.** WHEAT could have done a more concrete write up on specific DS components and strategies for their implementation, to be confident that WHEAT will not simply repeat the same programmatic mistakes and "relearn" in Phase II what already have been lessons on systems research in Phase I.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
4. Clarify and provide some classification of how WHEAT plans to manage a potential overlap of its pre-breeding activities (FP2) with the Genetics Gain platform, and justify the large operating budget for FP1 (enhancing WHEAT's strategy for impact).	The 'Genetic Gains Platform' is intended to support the AFS-(crop-based systems) CRPs' research activities. WHEAT describes its future collaboration with the GG Platform on pp.6, 29 (Table 7 on inter-CRP/ Platforms collaboration focus) & 30 (Table 8), 88 (FP2: 'many tools developed jointly'), 102 (FP3 linkage), Annex p.39 (Table 37-1b) and p.112 (uplift budget scenario, greater collaboration with GG Platform).	**Partially addressed.** It is still unclear how the WHEAT pre-breeding activities will be interacting with the now renamed Excellence in Breeding Platform, to avoid potential overlap. The CRP should aim at strengthening synergy and complementarity with the platform.
5. Provide more detail in response to the comments on management structure.	WHEAT has provided several clarifications; the CRP has reduced the number of FPs and CoAs. Overall this CRP will have a smaller management team. FP Leads are in most cases also Program Directors and members of WHEAT-MC. As part of Phase II resource planning, WHEAT will further detail ToRs for FP and CoA Leads, including resources to support their non-hierarchical facilitation of coordination and collaboration among project Leads and senior scientists.	**Satisfactorily addressed.**

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Agriculture for Nutrition and Health (A4NH) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A

1. Summary

- A4NH combines an issues-focused research agenda with a commitment to be a system-wide service provider, a policy analysis leader and a collaborator with non-CGIAR entities. This combination gives A4NH strengths, but it also makes management of the delivery and assessment of the impact challenging.
- The CRP aims to assist 20 million farm households in at least 12 countries to adopt improved varieties, breeds or trees and/or improved management practices, help 150 million more people, in at least 14 countries to be without deficiencies of one or more of some essential micronutrients, and contribute to 10% fewer women of reproductive age consuming less than the adequate number of food groups in four countries[2].
- The proposal frames its objectives, research activities, and assessment of potential impact in terms of the grand challenge of sustaining human health in the face of climate change and natural resource limitations. Phase 2 plans to build on and strengthen A4NH's role as a global leader in shaping agricultural investments in ways that help alleviate undernutrition, and also outlines good contributions to food safety and fighting infectious disease.
- The rationale for this CRP is highly convincing, reflecting known gaps in policy-relevant science and is consistent with expressed demand in the literature and research needs globally. The proposal presents a coherent set of FPs that generally works well across the CRPs to support the AFS-CRPs in achieving results linked to the main nutrition and health development goals of national governments, donor agencies and the CGIAR.
- The TOC is coherent and consistent with the SRF and other global approaches linking agriculture through food systems to nutrition. A4NH demonstrates potential for enabling a System-wide response to demand by high level policy makers for rigorous empirical evidence. It offers a scientifically rigorous and strategically positioned plan to deliver measurable impacts.
- The leadership of A4NH is strong in experience, past management roles, ability and willingness to collaborate across sectors. A4NH's first phase resulted in a relatively large body of published research, much of which is cited in the Phase 2 proposal as evidence of relevance and as a foundation on which to build going forward.
- This is a coordinated set of proposed activities that relate to each other in ways that should achieve broad-based synergies. That said, it is an extremely ambitious agenda, requiring large resources. It will be very important to ensure a regular review of activities and measurable outputs from the outset.
- A4NH has embraced innovative and forward looking thinking in developing this CRP.

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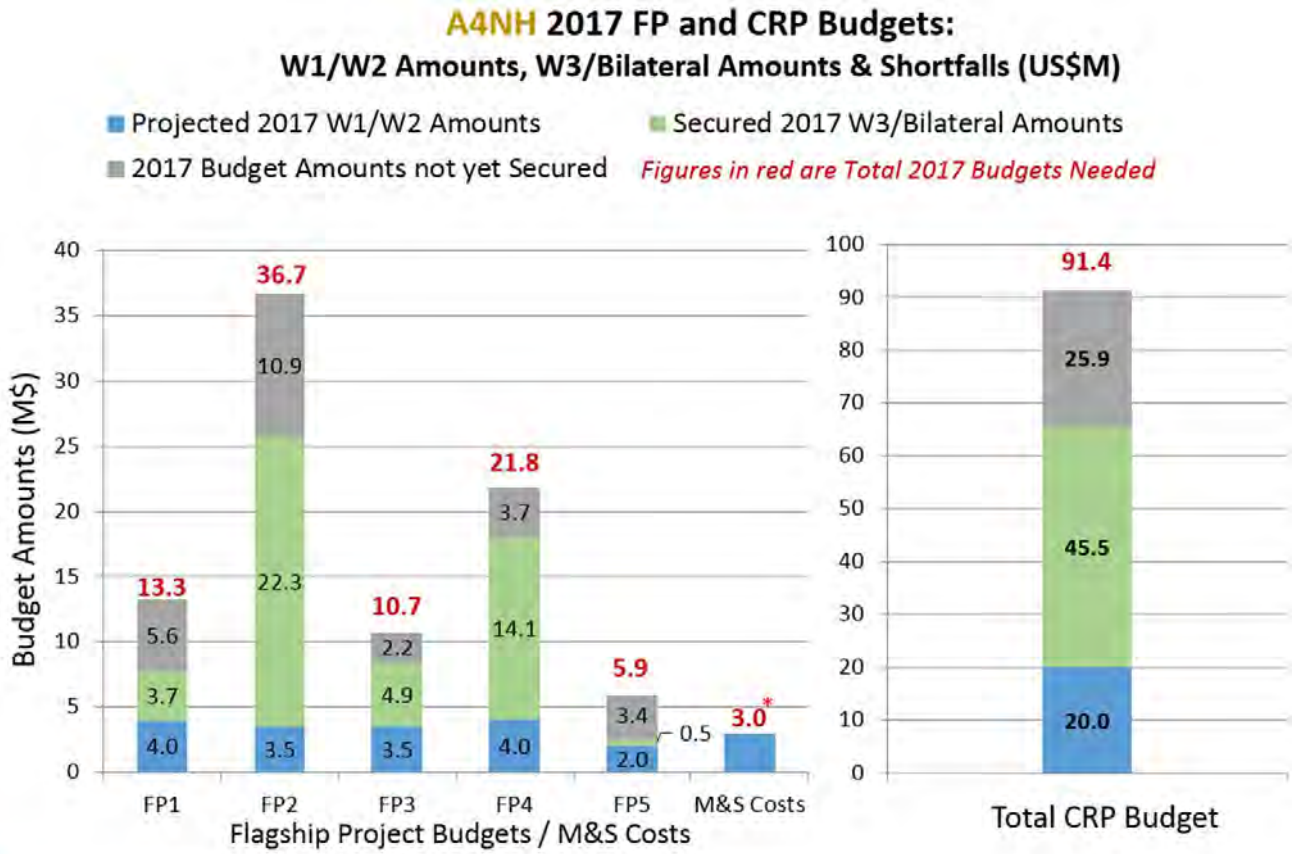
[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

[2] The CRP targets have not been independently verified.



* *does not include bilaterally-funded M&S Costs in the amount of US$1.3 M*

Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Food systems for healthier diets This FP focusses on a dynamic analysis of the transformation of food systems and diet transitions.	• A4NH is well positioned to offer intellectual leadership on the topic of food systems. • Focus on agenda of 'improving diets' is closely aligned with international research and policy agenda.	• Lack of details provided on testable policy-relevant research hypotheses. • Limited attention to articulating how FP1 will have measurable nutrition impacts at scale or how much will be known about cost-effectiveness of policy prescriptions. • FP has not had time to fully develop its comparative advantage in using agricultural research funds in this space.	Moderate
FP2: Biofortification (BF) FP2 will strengthen its emphasis on mainstreaming BF into partners' crop development work and shift its long-term focus to scale up BF, retaining a focus on evidence, knowledge production and sharing, monitoring and evaluation, and technical assistance to assure impact at scale.	• Well-established comparative advantage. • Shift towards a focus on scaling out and mainstreaming of tools and approaches. • Strong leadership and track record together with high quality of science.	• Evidence of the potential to develop cost-effective impacts at scale.	Strong
FP3: Food safety FP3 focusses on 1) risk-based pro-poor approaches enabling actors to meet important food safety demands; (2) market-based approaches that provide value chain actors with immediate incentives for behavior change; and (3) technologies that dramatically reduce the costs of ensuring food safety.	• An important area of cross-disciplinary and cross-CGIAR work. Linking of work between the agriculture enterprise & human health. • IPs and TOC are well thought through, nicely articulated and well aligned with the IDO on improved food safety. • High quality scientific outputs & strong comparative advantage (good CGIAR partnerships).	• Insufficient justification of the potential benefits. • Potential for any impactful gender-sensitive research in the mycotoxin – health space still needs to be articulated.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Supporting Policies Programs and Enabling Action through Research (SPEAR) FP4 seeks to understand why the disconnect between agriculture and nutrition persists, and more importantly, how we can turn agriculture into a powerful lever for raising people's health and nutritional status, while at the same time contributing to other outcomes, such as food security, income, equity, and sustainability.	• Potential as an outreach activity that will influence country policy via networks and active engagement. • Strong track record of work in this area. • Work on gender is a strong component that has had global influence.	• Relatively weak comparative advantage as other groups continue to build a large evidence base on these matters. • Concerns remain about several partners' ability to effectively take on leadership roles.	Moderate
FP5: Improving human health This FP aims to: 1. Understand and manage the gendered human health impacts (both risks and benefits) arising from intensification and changes in land-use; 2. Deliver gender-sensitive interventions targeted at livestock systems that improve health outcomes for zoonotic diseases with livestock reservoirs (with CRP on Livestock); and 3. Understand and manage interacting health and agriculture interventions, including AMR and insecticide resistance.	• High novelty of the proposed science e.g., focus on how crop and livestock systems can be reservoirs and incubators of infectious disease that impact human health and nutrition. • Strong track record of work with other CG centres and good potential for cross-CRP collaboration. • Few other competent suppliers in this relatively new area.	• TOC not fully developed. • Insufficient recognition of the importance of the enabling environment and potential sources of external risks. • Lack of articulation of the linkages between livestock and health and nutrition.	Moderate

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. Provide greater clarity on the researchable questions the CRP will focus on in relation to overweight and obesity and the comparative advantage of the CRP in addressing this complex and growing problem in low and middle income countries.	The cover note stresses that while undernutrition remains the focus of CGIAR research interests, overweight and obesity must also be taken into account. The proposal now argues that the entry point for A4NH's work in this domain will be FPs 1 and 4 on diet quality and policies that affect diet quality. Attention will be paid to both adequacy and moderation. A4NH intends to become a more significant player among many others trying to understand and shape the food environment. Specific researchable questions proposed include: a) how do changes in food systems lead to healthier diets, and what are optimal entry points?; b) how can innovations among SMEs protect nutrients in food during processing?; c) does information about healthier diets reach target beneficiaries, and do their knowledge changes lead to behavior changes?; d) how do food value chains contribute to improved nutrition?	**Satisfactorily addressed.** The Addendum provides significantly more detail than what appeared in the March proposal. The questions that will be addressed show that A4NH recognises the interconnections between under- and over-nutrition by weaving diet quality, moderation and value chain issues into their overall agenda. This approach is deemed adequately responsive, so long as research outputs clearly articulate the outcomes and policy implications in relation to the obesity/moderation questions. What has not yet been well addressed is the A4NH's comparative advantage in taking on such issues and the priority research foci for the CGIAR.
2. FP1 (Food Systems for Healthier Diets) should provide further details about the relevant research questions and methods to address them so that its potential contribution to CGIAR SLOs is clearer and more defensible... and, in particular, (a) provide greater specificity of the research agenda so a firm judgement could be made about its relevance and potential contribution to CGIAR SLOs; and (b) provide more details about the specific research and policy guidance agenda relating to obesity in low income settings.	A clearer articulation of the kinds of research that will be relevant to SLOs is given that includes questions focused on policy & technical support for achieving better diets: Which demand side innovations stimulate consumers to choose foods that make them healthier? What supply side innovations promote the affordability, availability and sustainability of nutrient-rich foods? How do value chain innovations influence the diet? Answers to these questions will help contribute to achieving IDOs related to improved diet and food safety, supportive of the main SLO on improved food and nutrition.	**Satisfactorily addressed.** Much more detail is now provided about the research questions and the potential for interactions with other CRPs. Greater attention to making outputs more specific and measurable is welcomed. Much of the W3 and bilateral funding has yet to be secured but this is an area into which the ISPC encouraged A4NH to move, and they have articulated their willingness to do so. Enough has been done to justify investment in this area; success will be judged on the team's

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	Example of 'methods' work: research to derive 'validated metrics and tools' for assessing diet quality and characterizing food systems in 4 focus countries. CoAs promise to study "challenges and opportunities for bringing new program related evidence…into policy discourse and action." Thus more attention given to translating science into practice with SLO outcomes in mind.	ability to attract the level of funding necessary to undertake this stream of work.
3. A stronger justification of the CRP's comparative advantage in some specific areas of work, e.g. WASH, malaria prevention and treatment, is needed or reconsideration in the agenda, depending on the strength of the justification.	According to A4NH, there was a misunderstanding due to poor communication. A4NH does not intend to "launch a whole new area of research involving WASH or the prevention and treatment of malaria". Rather, it proposes to consider such factors on the drivers of poor nutrition. In some cases, this will involve experiments, but always as just one component of a larger multi-sectoral policy or intervention. In this sense, A4NH is responding to the evolving international research agenda which sees nutrition-sensitive confounders as a key part of understanding the drivers of dietary change and nutrition outcomes.	**Partially addressed.** The ISPC agrees that A4NH needs to take into account factors such as access to adequate sanitation in order to ensure maximum contribution to the delivery of SLO2. The key question is 'what is the specific research in FP 4 that would be supported using W1&2 funds'? Specific parts of the narrative still raise concerns: "we will try to ensure that beneficiaries from agriculture interventions/programs/investments have access to all their minimum basic needs to live a healthy and productive and reproductive life. Appropriate access to water and sanitation services, hygiene knowledge, and access to health services to prevent and treat malaria are all essential inputs that are needed to protect health and ensure that gains in income and access to food, and information effectively lead to better diets, which in turn are used optimally by the body for growth, development, reproduction and health." Access to water and services are more the responsibility of development funding than research. What research activities will be

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		funded could and should be stated more clearly. A sharper focus on potential trade-offs associated with increasing consumption of animal-sourced foods, fruits, and vegetables, especially adverse unintended consequences, seems more appropriate.

Independent Science and Partnership Council

14 September 2016

ISPC Assessment of the Climate Change, Agriculture, and Food Security (CCAFS) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A

1. Summary

- CCAFS positions CGIAR to play a major role in bringing to scale the practices, technologies, and institutions that enable agriculture to meet two tightly interlinked grand challenges: food security and climate change (including measures for both mitigation and adaptation). CCAFS's strategic relevance is unquestionable.
- The CRP aims to assist 9 million people to exit poverty; remove the nutritional deficiencies of one or more essential micronutrients in 6 million more people; and reduce the agriculture-related GHG emissions by 0.16 Gt CO_2eq /yr. CCAFS shows a strong commitment to capacity development of non-CGIAR scientists and partners[2].
- CCAFS has fully embraced its role as an integrating CRP, expanding its scope to collaborate with AFS CRPs and demonstrating leadership in articulating programmatically, organizationally, and financially what a true integrating program can be.
- The CRP has an experienced and high quality management team with strong scientific expertise. It has a strong track record in being a unified voice for the CGIAR by raising the profile of agriculture and CGIAR in climate change debates, particularly in the UNFCCC negotiations and by feeding into IPCC assessments.
- The Theory of Change (TOC) is clear and compelling. However, the CRP level TOC is focused more on how the work is conceptualized and approached, than on causal relationships between program outputs, outcomes and ultimate (potential) impacts and could use greater elaboration and supporting evidence.
- CCAFS's four FPs comprise an impressive set of innovative, integrated activities ranging from forecasting and scenarios at national and regional scales, risk mitigation and management innovations to testing of specific technologies and interventions within Climate Smart Villages.
- Considering that CCAFS is at a relatively advanced stage of development, enhanced emphasis on laying the foundations for high quality impact assessments is an appropriate area of attention in Phase 2. Specifically, the CRP would benefit from increased attention to enhancing credibility of baselines, survey design, type of data collected as well as methodological approach and alignment with overarching research hypotheses.
- CCAFS has embraced innovative and forward looking thinking in developing the CRP, and therefore it is at the forefront of CGIAR science.

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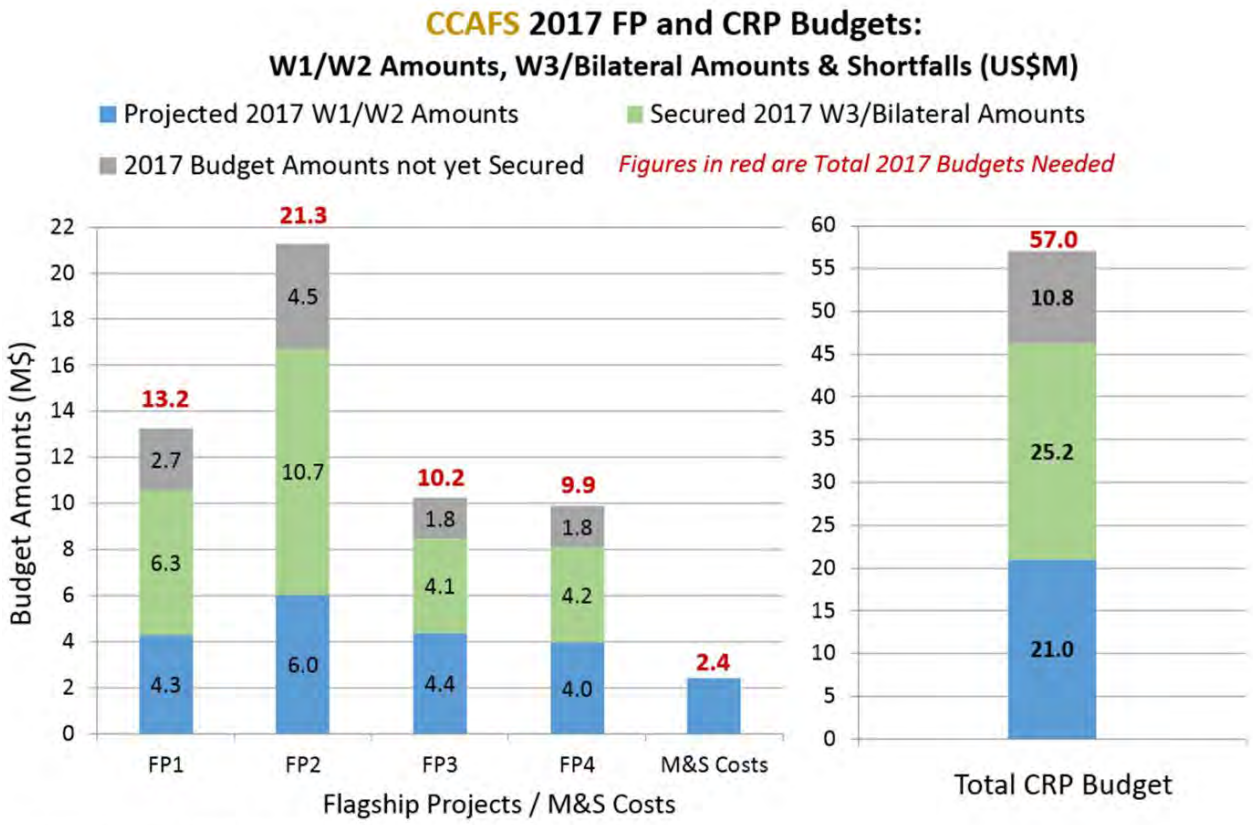

Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Priorities and Policies for CSA FP1 aims to assess how enabling policy environments and priority setting for targeted investment can support the scaling of CSA interventions.	• Aligns well with national and regional priorities as well as multiple SDGs. • New body of work on influencing AFS CRPs i.e., through informing their breeding strategies for the next generation of crops, livestock and fish. • Science leadership team has excellent track record.	• Good but limited in-house political science and political economy expertise. • Risk that engagement with AFS CRPs will not be at level needed.	Strong
FP2: Climate-smart technologies and practices FP2 addresses the challenge of transitioning to climate smart agriculture (CSA) at scale by testing, evaluating, promoting and scaling up CSA technologies and practices with its partners.	• Integral to CRP delivery with its aim to scale CSA. • Strong track record of influence in global debates on CSA. • Comparative advantage based in the breadth of its CSA portfolio: few institutions that have the ability to pull together CSA-relevant technologies and practices across different agro ecological contexts. • Innovative approach to science: place-based testing of technologies.	• Insufficient specification of causal links between outputs, outcomes, and impacts in impact pathways.	Strong
FP3: Low emissions development FP3 aims to promote low emissions development (LED) strategies that will reduce agricultural GHG emissions while ensuring food security. It focuses on both the two strategic goals of CSA (mitigation and food security).	• Sound rationale for focus on smallholders as a target group. • Strong scientific team with well-developed partnership strategies with external non-CGIAR institutions that have research and delivery strength in FP3 focus areas.	• Risk that cost-effective low emissions development technologies and practices may not be feasible for smallholders. • Lack of clarity in how uptake of policy prescriptions on mitigation in low- and middle-income economies will be achieved.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Climate services and safety nets FP4 aims to develop appropriate climate information and advisory services, weather-related insurance, and food security early warning and safety net programs as well as support governments and development organizations in their climate-informed planning.	• Focussed on a critical set of issues for delivering the CRP outputs. • Comparative advantage based on CGIAR's understanding and background in farming systems to inform development of agricultural risk management strategies and products. • Strong partnerships, including with the private sector (risk management and media).	• Research could be better embedded in the wider scope of research that deals with localized risk mitigation, economic shocks, and institutional instability. • Evidence supporting the assumption that information constraints and inability to mitigate risks at farm level are the critical barriers to insurance adoption is still weak. • The risk inherent in relying on partner climate centers and national meteorological agencies for the validation of downscaled climate predictions, an important FP output. Partners may not have adequate resources or the capacity.	Moderate

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. CCAFS Phase 2 proposes a highly ambitious agenda of working across all eight AFS CRPs, and information on how the CRP intends to prioritize efforts should be provided.	Addendum responds to this comment (no additional text in the proposal). CCAFS takes a demand-driven approach to AFS CRP linkages. Thematic priorities for collaboration were identified over several months and these were used as the basis for defining the Learning Platforms; and AFS CRPs then identified the priorities for CCAFS-related integration around those LPs. Examples provided. The allocation of budgets among Centers is determined at the project level within FPs. All current CCAFS projects have been selected through a prioritization process on the basis of formal competitive criteria and a Delphi process in which all Centers appraised each other's project proposals. The projects are embedded in regional impact pathways generated through extensive consultations with partners, and regional workshops over 2014 and 2015 refined their theories of change, impact pathways and targets, followed by extensive interaction to ensure that these are plausible and credible.	**Satisfactorily addressed.** The response is evidence of the rigour and replicability of an internal competitive process that has a high chance of selecting the research topic with the best mix of impact, likelihood of success and relevance. The Delphi process ensures that both quantitative and qualitative data are taken into account for prioritization. This is further evidence of good governance and CRP leadership.
2. Having defined nutrition and health targets with A4NH, clarify how this has shaped CCAFS priorities and the alignment with the research activities proposed.	A4NH has a target of 116 million people without deficiencies of several micronutrients, CCAFS will make a modest contribution (6 million people) via work on nutrition-sensitive agricultural programs and policies in key A4NH and CCAFS target countries (India, Bangladesh and Burkina Faso). This will be largely achieved via the inclusion of nutrition considerations at national/state adaptation and investment planning. Jointly developed climate, food, and nutrition scenarios at national and subnational levels will be used in planning and investment policy	**Satisfactorily addressed**. Good evidence of engagement with potential for co-learning.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	processes. It describes interactions with A4NH, particularly FP1 and FP4 that has shaped CCAFS research.	
3. Elaboration of how the CRP will use impact assessments for hypotheses testing and validation that its work calls for, and elevation of the role of MELIA in the CRP proposal which should also be reflected in the proposed budget.	CCAFS intends to improve its use of IA for hypotheses testing, and validation of TOC and research results by (a) creating a design for measurement against the 2011-2013 CCAFS baseline surveys in 2018 so that it explicitly tests the FP and LP hypotheses, supplementing where necessary with project baselines at higher governance and spatial levels, (b) changing the requirement for epIAs so that the impacts assessed are explicitly linked to the outcomes reported annually, and that the IA specifically tests the theory of change at project and FP levels, and (c) ensuring that all epIAs address hypotheses on gender, youth and social inclusion. CCAFS has doubled the time allocation of MELIA consultant to 120 days (from an 60 days), and IA funding increased from USD 100-150K to 200-300K a year (2018 onwards). The requirement for MELIA (formerly MEL) within all Flagships, individual projects and learning platforms remains.	**Partially addressed.** The specific amendments – increased CRP-level IA budget, and improved clarity on the role of MELIA indicates that the proponents recognize the importance of IA. The critical question here is the rigour and amenability of data collected in CCAFS baselines to complete credible adoption and impact assessment studies. Considering that CCAFS is at a relatively advanced stage of development, enhanced emphasis on laying the foundations for high quality IAs is an appropriate area of attention in Phase 2. Specifically, CCAFS would benefit from increased attention to credibility of baselines, survey design, type of data collected as well as methodological approach and alignment with overarching research hypotheses.
4. Providing greater clarity on how site integration affects the impact pathways, including information on the evolution of this aspect into the prioritization process.	Addendum responds to this comment (no additional text in the proposal). The use of CSVs in the framework of the site integration process will be key to (1) bringing AFS CRPs to conduct their research in an integrated manner and (2) to layout sound avenues for scaling up of the CSA options, depending on opportunities as prioritized by countries. AFS CRPs take the lead on development and testing of technologies, whereas CCAFS leads on testing these technologies within portfolios of adaptation and	**Satisfactorily addressed.** As regards CGIAR site integration plans, much will depend on future trajectories of these plans within different regions. But, the explanation provided makes a credible case that CCAFS will embrace the potential gains from site integration without compromising the integrity of its program.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	mitigation responses to climate risks, including testing impact pathways to achieve uptake at scale. Site integration has not changed CCAFS focus regions or countries, but influenced Phase 2 allocation of resources in recognition of the efficiencies offered.	

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Policies, Institutions and Markets (PIM) CRP-II revised proposal (2017-2022)

ISPC CRP RATING[1]: A-

1. Summary

- The CRP Phase 2 proposal on Policies, Institutions, and Markets (PIM) aims at strengthening the evidentiary base for better policies, stronger institutions, and well-functioning markets. PIM aims to assist 10 million farm households in adopting improved varieties, breeds or trees, and/or improved management practices, 3.4 million people exiting poverty, in restoring 2.05 million ha of degraded lands and improving the rate of yield increase by 1.07 percent[2].
- The key public goods targeted by PIM's research include high-quality publications, new tools and methods, open-access datasets, improved design of development programs, options for policy reforms, and proposals to strengthen institutions. The expected users are governments at all levels, researchers, development practitioners, funding agencies, private sector firms, and the media.
- PIM has much to offer the CGIAR in terms of delivering on important System level IDOs. The CRP proposal builds on the largely successful efforts made under Phase 1. The scientific leadership and CRP management structure and personnel are strong, with excellent track records of publications and achievement. PIM actively engages an impressive set of external partnerships. Modelling and analytical expertise is strong across a number of disciplines and leadership in gender related issues and analysis is notable.
- The challenges related to overcoming poor policies and institutions are fundamentally important to address if the CGIAR SLOs are to be achieved. PIM's major policy-level impacts will come from influencing global agendas and policies, sharing tools and datasets, testing innovations, and raising the bar on research quality via capacity building and communities of practice. These are reasonable target outcomes.
- As an iCRP, much of PIM's impact should derive from contributing to the success of other CRPs, e.g. on topics such as value chains, seed systems development, livelihoods, and improve diets. PIM needs a stronger commitment to this vision and to embrace a more participatory approach to cross-CRP research priority-setting and prioritization of system-wide collaborative efforts. This could be better informed by PIM undertaking a systematic analysis of its comparative advantage to help sharpen its own strategic focus. Though internal linkages and complementarities do exist within PIM, strategic inter-dependencies between FPs, i.e., showing the relationships between FP-level outputs, outcome and program-level outcomes, are not strikingly evident.
- The revised and expanded ToCs and IPs provide clear and reasonable formulations including some of the key assumptions and risks inherent in achieving targeted outcomes. Elaboration and development of testable strategic research hypotheses overarching each FP would help prioritize the most critical bottlenecks and identify where research and research related activities are most likely to effect change.

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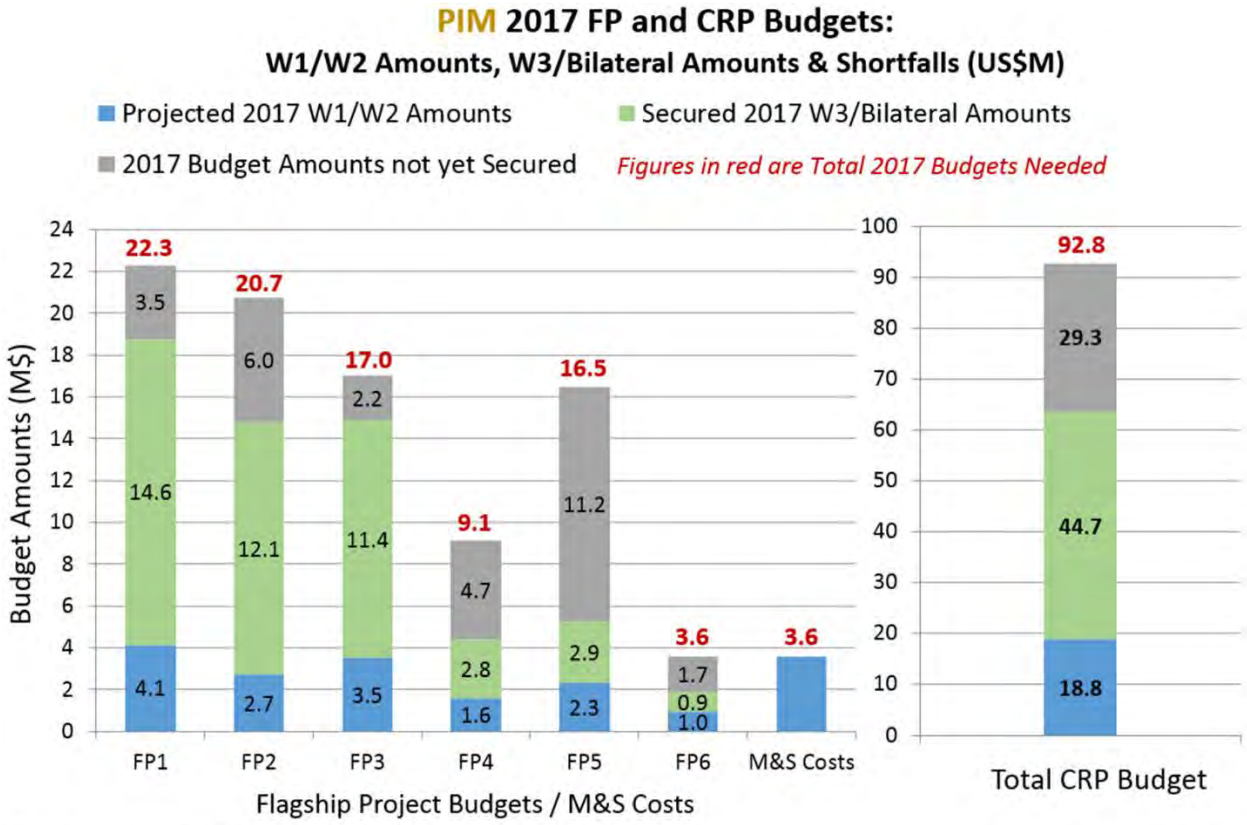


Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Technological Innovation and Sustainable Intensification FP1 seeks to contribute to the CRP objective of agricultural growth and sustainability by assessing alternative scenarios for future food security, analysing technological solutions to address various challenges and examining public policies and investments in science and innovation.	• Frontier level modelling skills providing highly relevant (to the System) medium and long term perspective in foresight Expertise in science policy, e.g., ASTI, generating clear and well-defined IPGs at low cost. • Policy dimensions of technology adoption complementary to AFS CRPs.	• Relatively new body of work on technology adoption (and alternative suppliers), so limited experience and track record. • Insufficient effort to-date to validate models and to strengthen their predictive value.	Strong
FP2: Economy-wide Factors Affecting Agricultural Growth and Rural Transformation FP2 examines how economic transformation affects key parameters of agricultural development and particularly the implications for job creation for youth, with a focus on sub-Saharan Africa.	• Interdisciplinary team with strong record of peer-reviewed publications in high impact journals and widely used toolkits of national economy-wide models and datasets. • Good (effective) upstream and downstream partners. • Strong commitment to institutional strengthening.	• Engagement strategy of CRP may not be sufficient to achieve desired adoption of tools and findings for policy-makers. • Specific nature of the FP 2's linkage with Country Strategy Support Program needs greater transparency.	Strong
FP3: Inclusive and Efficient Value Chains FP3 focusses its research on improving the efficiency and equity of agricultural value chains.	• Global/regional trade models recognized for quality and experience with measures of distortions in agricultural markets, and perspectives on data and methods used by others. • Strong research team with expertise and tools for evaluation of value chain intervention. • Relevance of work on gender, youth, and capacity development. • Explicitly recognizes need for linking more closely with other FPs.	• Lacks a 'nutrition perspective' with respect to added-value of value chains at local and domestic levels. • Challenge exists to establish effective collaboration with other CRPs due to weak social science research capacity across the System.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Social Protection for Agriculture and Resilience FP4 on social protection and financial inclusion explores the trade-offs between assistance to the poor and investments in growth**.**	• Examines a highly relevant topic for the CGIAR: how social protection programs can complement agricultural growth and rural transformation. • Very strong research team; distinguished record of publications and policy influence; researchers recognized as leaders in the field. • Long standing partnerships with social protection funders and implementers.	• Case made for establishing the relevance of this work in terms of delivering on SLOs less compelling than other FPs. • There is a risk that the comparative advantage of IFPRI on studying influence of social protection on agriculture could be lost if research agenda broadens to looking at social protection per se.	Moderate
FP5: Governance of Natural Resources FP5 focusses on the governance of natural resources within the context of agricultural growth and development.	• Long-standing history in institutions for NRM (especially through CAPRi) producing tools and lessons relevant for other CRPs on a highly relevant topic – NRM management. • Strong multi-disciplinary research team with participation from other CG centers. • Long standing partnerships with global, regional and national organizations in land tenure and common property.	• Further specifics are needed on prioritization of research topics at sub-national level regarding governance processes and institutional effectiveness for policy implementation. • Risk of researchers seen as parties to a political process, thus not objective. • Vision of how governance research will contribute to research outcomes across other agro-food system CRPs not clear.	Strong
FP6: Cross-cutting Gender Research and Coordination FP6 focuses on the gender dimensions of agricultural and related activities by designing tools and methods for broader application, establishing priorities within PIM's gender research agenda and drawing together separate	• Strong quantitative skills for understanding gender roles and effects of interventions with a clear comparative advantage. • Track record in development of tools, e.g., Women's Empowerment in Agriculture Index, and collecting sex-disaggregated data	• Further validation needed of WEAI and similar indices". • Stronger articulation needed on how FP6 supports delivery of outputs across the CRP's other FPs.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
research strands to clarify implications for agricultural productivity. It houses the Gender Platform, which aims to strengthen the capacity of gender analysis across the CGIAR and develop frameworks for research.	which are expected to have indirect effects on many IDOs. • Home for the CGIAR Gender Platform (important for work of other Centers and CRPs) and partnership with national and global research organizations, aid agencies, IFIs, NGOs, and foundations.		

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. Develop and initiate a plan to engage in a critical analysis of PIM's comparative advantage that enhances the proposal's strategic focus and its particular contribution to the delivery of the SRF.	A 3-fold definition of comparative advantage (expertise, contribution to SLOs and "unique perspective") is given and how it relates to PIM described on pp 33-35 (Table 1.0.8.1). PIM restates and continues to emphasize its considerable qualifications. PIM indicates that it 'continuously reflects' on its comparative advantage, e.g., June 2016 CRP Directors mtg.	**Partially addressed.** While PIM's considerable qualifications (including unique perspective) are apparent and highly relevant to the issue, a critical comparative analysis of PIM vis-à-vis other alternative providers (e.g., World Bank, universities) is missing. 'Continuous reflection' is useful, but it is not the same as undertaking an explicit 'critical analysis of PIM's comparative advantage' to consider what its strategic focus should be – important both for PIM and the System.
2. Strengthen the overall coherence of the CRP through identification and strengthening of the functional linkages among the FPs.	Argues that integration from PIM FPs to other CRPs is at least as important (perhaps more) as cross-FP integration within PIM. As for the specific intra-CRP related concern, the revised CRP proposal now includes a conceptual framework (p. 28) and description of linkages between PIM FPs. Other examples of linkages between FPs are highlighted within the FP narratives. Seven specific examples of cross CoA/cross FP interactions are highlighted in the Addendum that are also mentioned in the FP narratives. Fig 1.0.3.2 (p. 16) shows how different topics fit together. Fig 1.0.7.1 (p. 31) provides a specific example (Ethiopia) of how these processes play out in reality.	**Partially addressed.** Response reasonably convincing regarding the greater importance of cross-CRP linkages, especially for FPs 1, 3, 5, 6. These FPs are largely independent of each other and their coherence comes from their roles vis-à-vis the entire CGIAR portfolio (where it seems fairly clear that these are unique and important in a CGIAR context) Neither PIM's conceptual framework (Fig 1.0.6.2 on p. 28) nor the brief descriptions of linkages demonstrate how the activities within FPs actually work together (and why) and how they complement one another to achieve outcomes. More could have been done to explain the most important inter-dependencies between these FPs, showing the relationships

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
		between FP-level outputs, outcome and program-level outcomes. The bigger picture of cross FP integration within this CRP is still not apparent, i.e., how all the pieces fit together in a coherent program of work.
3. Define a strategy for more effectively integrating social science and policy research across the CRPs to maximize synergies, elaborating how PIM will engage with and leverage the efforts of other CRPs to achieve System-level objectives.	3 new figures give examples of how PIM integrates with other CRPs for specific topics / within specific countries on shared agendas of social science research. Narrative describes 5 on-going or planned activities to strengthen integration: (i) continued discussion with CRP leaders to identify collaborative social science agendas; (ii) communities of practice (CoP) centered on FP1, FP3, FP5 and (iii) country-level collaboration, for example through CSSPs; (iv) FP6, the platform for gender research, which also may be viewed as a CoP; (v) an annual social science conference. Except for FP6, all FP narratives have been updated to provide detail on social science interactions with other CRPs. Addendum explains that the integration of social science and policy research across the CRPs takes place at the portfolio level, as different programs jointly contribute to outcomes.	**Satisfactorily addressed.** Building and nurturing COPs would seem to be a reasonable approach within an overall social science & policy research integrating strategy. Reassuring to see many examples of cross CRP interactions highlighted in the PIM FP narratives (although specific nature of the collaboration cannot be ascertained in those brief descriptions.). In the absence of any portfolio level mechanism, the claim that "integration of social science and policy research takes place at the portfolio level" must be viewed as an aspirational statement rather than a strategy.
4. Provide further articulation of the Theory of Change at the program and FP levels specifying the underlying assumptions and impact pathways that recognize the complexities of achieving policy and institutional change. Particular concern was expressed by ISPC regarding: lack of discussion of	"The sections of the ToC at the program and flagship level have been revised. The presentation of the flagship theories of change have been aligned with the general program ToC, and assumptions are now more explicitly covered in each flagship." This includes a number of new figures (Fig 1.0.3.1, 1.0.3.2, 1.0.3.3) to better illustrate ToC and IPs.	**Satisfactorily addressed.** The revised and expanded ToCs and IPs (with new figures) are now better formulations that include some of the key assumptions. A real effort has been made to recognize the complexities of the political and institutional processes underlying policy changes.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
complexities of policy and institutional processes and lack of explicit statements of assumptions.		Good qualitative statements of assumptions and risks. Elaboration and characterization of the key bottlenecks and identification of where research and research related activities are most likely to effect change would be useful to add to the ToCs.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Water, Land and Ecosystems (WLE) CRP II revised proposal (2017-2022)

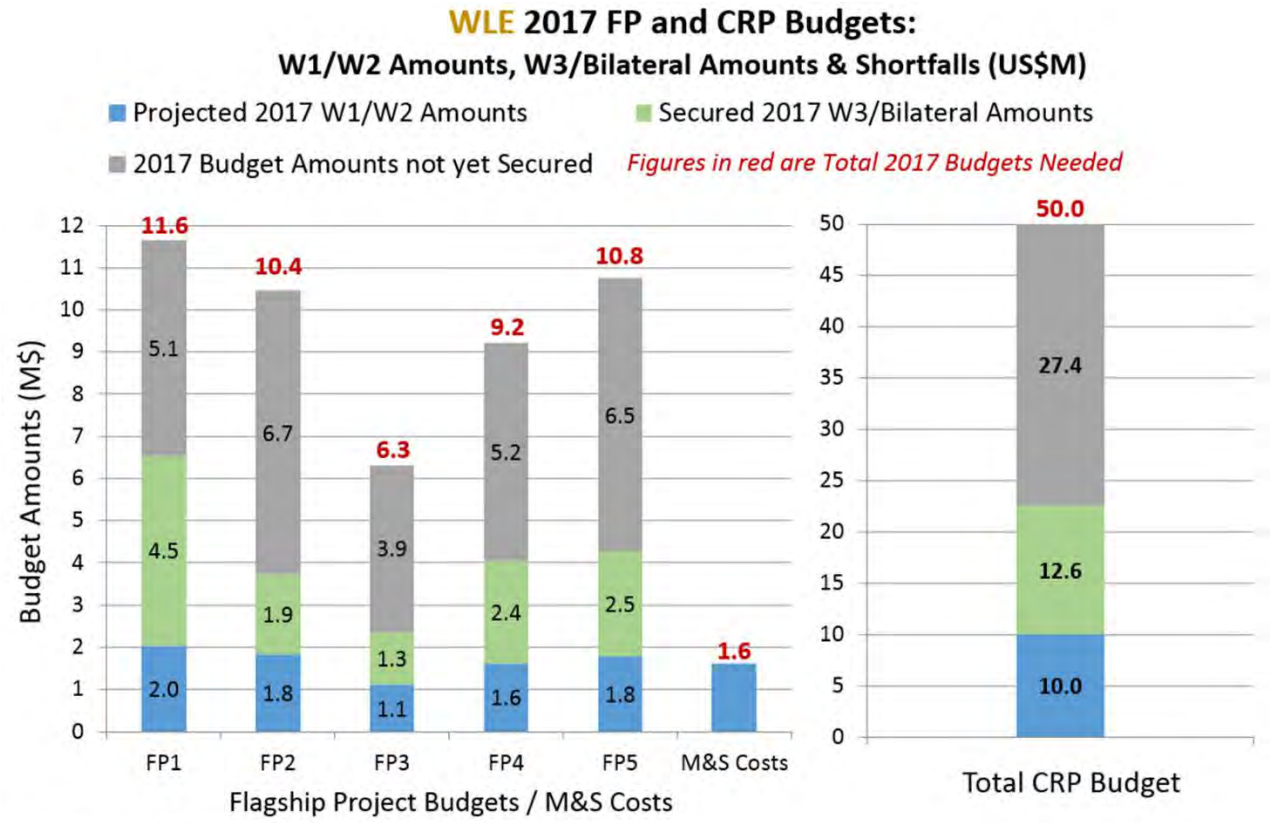
ISPC CRP RATING[1]: A-

1. Summary

- WLE aims to provide the evidence base and solutions to help decision-makers scale up sustainable water, land and ecosystem management innovations and investment. The CRP aims to assist 21 million farm households to adopt improved water and land management practices, 5.74 million people to exit poverty, a 5% increase in water- and nutrient-use efficiency over 24 million ha across its target countries, a 0.01 Gt CO_2eq reduction in agriculture-related GHG emissions, and the restoration of 7.7 million ha of degraded land[2].
- The proposed staff and newly appointed leader have good leadership experience; recent reports/evaluations make reference to the CRP's effective management and governance arrangements.
- The ambition of WLE is central to the SRF. It addresses a grand challenge that underpins the entire CGIAR, and it covers areas that CGIAR has directed insufficient funds to in the past. As an iCRP, it takes seriously its intended role of providing a pathway to enhance delivery of the System as a whole into key policy areas in the WLE field.
- The partnership strategy indicates a well-developed appreciation and understanding of the many and varied partner relationships, including linkages to regional and global policy initiatives that WLE requires to achieve its objectives. Nevertheless, given the CRP's huge research agenda, its outward focused partnership strategy remains relatively vague.
- The research activities of the CRP will consist of modelling and policy analysis that seek to analyze the sustainability of different technologies, combining insights from social sciences and natural sciences. Interactions of this research and its applications across the CGIAR show considerable promise of productive collaboration. It is not always sufficiently clear, however, whether there is a close relationship between this CRP and the AFS CRPs on technology development, or if most of the interaction will be linked to policy advocacy and data provision.
- WLE appears to define its main role as identifying winning packages of technologies, policies, and institutions, and facilitating the needed changes to bring these packages into social and economic use. Whilst there is no doubt that this is an important area of work, it is not always clear what the sources of innovation and the expertise in policy process and political analysis are, that will allow WLE to occupy this rather high-level position.

[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

[2] The CRP targets have not been independently verified.



Data Source: CGIAR System Management Office

2. Characterization of Flagships

FP	Main strengths	Weaknesses/Risks	Rating
FP1: Restoring degraded landscapes The FP focusses on support to the implementation of equitable landscape and soil restoration strategies and concomitant monitoring, evaluation, and learning systems.	• Good evidence of collaboration and integration with other CRPs. • High priority area for the CGIAR and few alternative suppliers of research with a global mandate. • Good alignment of the research with global initiatives.	• No clear partnership strategy with relevant organizations, agencies and initiatives outside the CGIAR. • Assumption of the availability of existing, validated knowledge and technology for the restoration of degraded landscapes is questionable. • Limited track record of ability to influence policy in support of landscape and soil restoration.	Strong
FP2: Land and water solutions for sustainable intensification The objective of this FP is to deliver science into practice that will help unlock the potential value of more resilient farming systems.	• Few alternative suppliers of research with a global mandate. • Team with sound scientific expertise and track record. • Recognition and integration into proposal of the need for transformative change to achieve adaptation and intensification at scale.	• Limited track record and experience in influencing policy to support sustainable intensification. • Potential over-reliance on the availability of existing knowledge and technologies that can increase system resilience with limited trade-offs.	Strong
FP3: Sustaining rural – urban linkages The focus of this FP is to contribute to urban food security and to reduce the environmental impact of urbanization through the implementation of urban waste and water resource recovery and reuse business models.	• Strength of expertise and track record on issues of water and nutrient flows. • Good potential for impact in area of work of rapidly growing importance, given prior experience in this area.	• Current lack of focus enhances the risk of moving beyond areas of comparative advantage. • Need for more direct engagement with sustainable cities and other major initiatives on 'tropical urban design' to provide leverage for impact along non-traditional development trajectories.	Strong

FP	Main strengths	Weaknesses/Risks	Rating
FP4: Managing resource variability, risk, and competing uses for increased resilience The focus of this FP is on reducing risks and losses to agriculture from floods and droughts and natural resource use trade-offs.	• FP directly addresses one the world's grand challenges. • Good network of proposed internal and external partnerships potentially facilitating delivery. • Strength of scientific expertise and track record.	• Broad scope of research may affect feasibility of delivery. • Limited track record and experience in influencing policy on natural resource use.	Strong
FP5: Enhancing sustainability across agricultural systems This FP focusses on the identification and testing of ways to promote sustainable intensification at scale with partners, including AFS CRPs.	• Ambition of the FP to become an important interface across the CGIAR for links with global partners and initiatives, thus potentially enhancing its role as a globally integrating CRP.	• A lack of focus and specificity raises questions about the feasibility of delivering results. • Over-reliance on partners who have a mixed track record on implementation and delivery. • Limited track record and experience in influencing policy in support of the promotion of sustainable intensification at scale.	Weak

3. Assessment of CRP response to the ISPC major comments

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
1. Further elucidation of the process of prioritization at the basis of the research agenda for the CRP, and how this affects the functional integration amongst FPs, and with the other AFS and GIP CRPs.	Provided more clarity on how WLE sets its research priorities within and among its Flagship Programs (FPs) and with regard to its joint work with other AFS and GIP CRPs (see Annex 3.6). Did not consider it feasible or cost-effective to set criteria a priori and then follow a scoring and screening process; instead used the Results Based Management (RBM) system (Annex 3.5) to distinguish among the best investments across the program. Functional integration via four thematic FPs, each an important issue on their own, together a coherent, integrated body of work. In-depth discussions with the leaders of other CRPs to identify joint priorities (reflected in Annex 3.6 on linkages and site integration). WLE will engage when there is evidence of strong comparative advantage, else via partners. WLE FPs will concentrate their work in integration sites where AFS and GIP CRPs also work, frequently through the same local and national partners.	**Satisfactorily addressed**. Overall, the team provided coherent and convincing arguments and examples of the type of cutting edge research they will engage in. Some specific examples are given, some more convincingly than other. Priority setting via triangulation of the most important issues appears appropriate, particularly for a CRP that is dealing with complex, adaptive systems with often contended values (Confusingly the RBM on page 41 of Annex 3 is incorrectly labelled as '3.6 Results Based Management', rather than '3.5'). The thematic scope for priority collaboration with other CRPs will happen via alignment with FPs, while the geographic scope is determined through CG target countries, which seems appropriate. Strong linkages on joint priorities identified with A4HN, CCAFS and PIM as well as collaborations with the Agri-Food System CRPs are outlined in Annex 3.6. This makes sense as long as suitable partners are identified. Problems can arise when the capabilities simply don't exist. It would be useful for the team to reflect on this core risk and possible mitigation options. While the principle is logical, the approach poses a risk to good governance. The potential

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
		for moral hazard to occur is large ('double dipping'). This requires close attention to monitoring and evaluation of resources used in the delivery of agreed outcomes. The concept of 'additionality' as an essential and documented requirement before WLE funds can be accessed might mitigate against this risk.
2. Clarification of the focus of the CRP on facilitation versus science, accompanied by a description and clarification of the science, technology, and innovation agenda (particularly for FP1, FP2 and FP4).	The WLE team believes that their unique, comparative advantage lies in the integration of both science and facilitation, with research applied along the entire impact pathway. They hypothesis that the ISPC's perception might be the result of the team's response to earlier comments. This might have overshadowed the explanation of the science that WLE will deliver. The team acknowledges that WLE must conduct cutting edge disciplinary biophysical and socioeconomic research plus translational research. The team then proceeds to give concrete examples for: FP1: a) modelling benefits & costs of interventions at landscape/catchment level & quantification of on- and off-site ecosystems services. b) building soil carbon reserves and c) UAV-based land and crop monitoring (soil mapping, chlorophyll florescence, near-infrared spectroscopy in the soil-plant continuum.	**Partially addressed.** It seems plausible that WLE might have underplayed the research agenda. The addendum provides a compelling example of WLE's contribution to the development of NRM-focused water policies by providing science-based policy support for the water-energy-food production nexus (e.g. rather than simply replacing old water pumps with new, solar powered pumps to extract scarce groundwater, the technology can be used to sell power into the grid). a) modelling seems to be the only way this issue can be addressed; this deserves support. b) less convincing, given the global resources that have already gone into this issue that seems to defy resolution. c) appropriate given the potential of this technology at a time of rapidly declining costs for UAV.

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	FP2: In collaboration with AFS CRPs, LWS will co-develop research on agricultural land and water management (ALWM) technologies for small scale irrigation and poverty alleviation (e.g. ICT for smallholder farmers to help manage water and soil capital) and improving performance of medium- and large-scale publicly managed irrigation systems. FP4: (a) Designing approaches that simultaneously reduce flood damage and recharge the aquifer (managed recharge); (b) remote sensing of water resources for early warning; and (c) co-design of flood/drought weather index insurance for smallholders.	Advice for smallholders via mobile apps for example, has potential and is being tried elsewhere. This is an area that comes up in several iCRPs and requires careful coordination. Transforming the NRM performance of large farms and commercial farms by '… applying business-like approaches to transform delivery of irrigation services' is ambitious and desirable, but will require a sustained effort in influencing perceptions and ambitions while developing skills of the operators. Projects teams are likely to encounter aspirational, educational and institutional barriers. a) innovative and disruptive but not without risks; the type of research CGIAR should be involved in. b) early warning rarely leads to early action; this needs to be embedded in a clear signal – action framework. c) again, some concern about possible, excessive overlap with CCAFS.
(WLE has addressed both issues together) 3. The ISPC requests WLE to provide details on the scientific expertise within the CRP on the issues of process and intermediation, as well as its comparative advantage in dealing with these issues.	WLE argued strongly that they have considerable core expertise in sociology, political economics of agro-ecosystems and NRM; they also acknowledge that that this pool of expertise could be strengthened via collaboration and partnerships with other CRPs. They outlined these strengthened partnerships in a revised Annex 3.6 that now demonstrates additional links particularly via FP 1 and FP5.	**Partially addressed.** Added links to e.g. UNESCO-IHE and Wageningen University are welcome, but it could be questioned whether these changes go far enough in order to really draw in the wealth of global knowledge that resides outside the CGIAR. This is a perpetual question not just for WLE but also for the CGIAR as a whole. It

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
Further information on the types of scientific knowledge and impact pathways that will inform the "influence agenda" and shape institutions, including an increased awareness of trade-offs and uncertainty across scales and priorities as part of the recognition of the complexity of systemic change should also be provided. 4. Provision of further information on the scientific expertise within the CRP on the issues of process and intermediation, as well as its comparative advantage in dealing with these issues.	Across CRPS, WLE gives an example where they are jointly promoting change. This is a collaborative effort by PIM, A4NH, CCAFS and WLE that defines a shared policy agenda and coordinate policy-oriented research during Phase 2 starting with Bangladesh and Ethiopia. In terms of impact pathways and ToC concerns, WLE points to their long tradition and experience in this field going back to the Challenge Program on Water and Food where some of these concepts were pioneered.	is understandable that in an environment with shrinking resources organisations need to protect their internal expertise. This needs to be balanced against the long-term benefits of true collaboration in order to tap into expertise and knowledge that sit outside. We need to question whether it is sufficient to identify individuals for a range of outside institutions or if there might be more robust models of engagement that would overcome single person dependencies. The example given for cross CRP collaboration seems appropriate. This is correct and it needs to be recognised that they have come a very long way from the early days of the Challenge Programme. WLE is probably better placed than most CRPs due to that experience, but this is not an argument for keeping most of the work in house. So, whilst the ISPC has no doubt about the usefulness and necessity of the proposed activities, what is not always clear from the proposal, is what the sources of innovation and the expertise in policy process and political analysis are, that will allow WLE to occupy its proposed 'high-level' position.
5. Elaborate upon the justification for prioritizing RUL (FP3) in the CRP as well as a discussion of the comparative advantage of CGIAR in this area.	WLE argues that the inclusion of a flagship on Rural-Urban Linkages is a result of the growing importance of urban and peri-urban areas for the overall sustainability of agriculture and food systems, which has been stressed by a number of partners and by the	**Satisfactorily addressed.** ISPC agrees with the urgent need to consider and develop linkages to urban and peri-urban regions. For a food systems perspective, this is where the action is. The ISPC asked some

Initial ISPC comment (16 June 2016)	CRP response/changes proposed (31 July)	ISPC assessment (14 September)
	ISPC itself. Rural and urban landscapes can no longer be treated separately; they are increasingly intertwined, and their effective sustainable management requires an integrated systems approach. WLE accept the recommendation to consider livestock waste and as discussed in Annex 3.6, this is already contemplated in East Africa with the Livestock, and Agriculture for Health and Nutrition (A4HN) CRPs.	pertinent questions about the science agenda and the involvement of NGOs and community initiatives that have not been answered. This is not completely surprising, given that this is an emerging field for science investigation and policy interventions. Addressing these concerns scientifically and conceptually could form the basis for a new and contemporary science agenda. The authors have made a compelling argument why this work is essential for the CGIAR, given the natural resources needed to feed growing urban (and often poor) populations. WLE proposes investigations of nutrient, N, C and water cycles with an emphasis on recycling wastes. The arguments are compelling and the need for this type of research is real. Leadership from the CGIAR could go a long way to establish some real capability in this area.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the Platform on Big Data revised proposal (2017-2022)

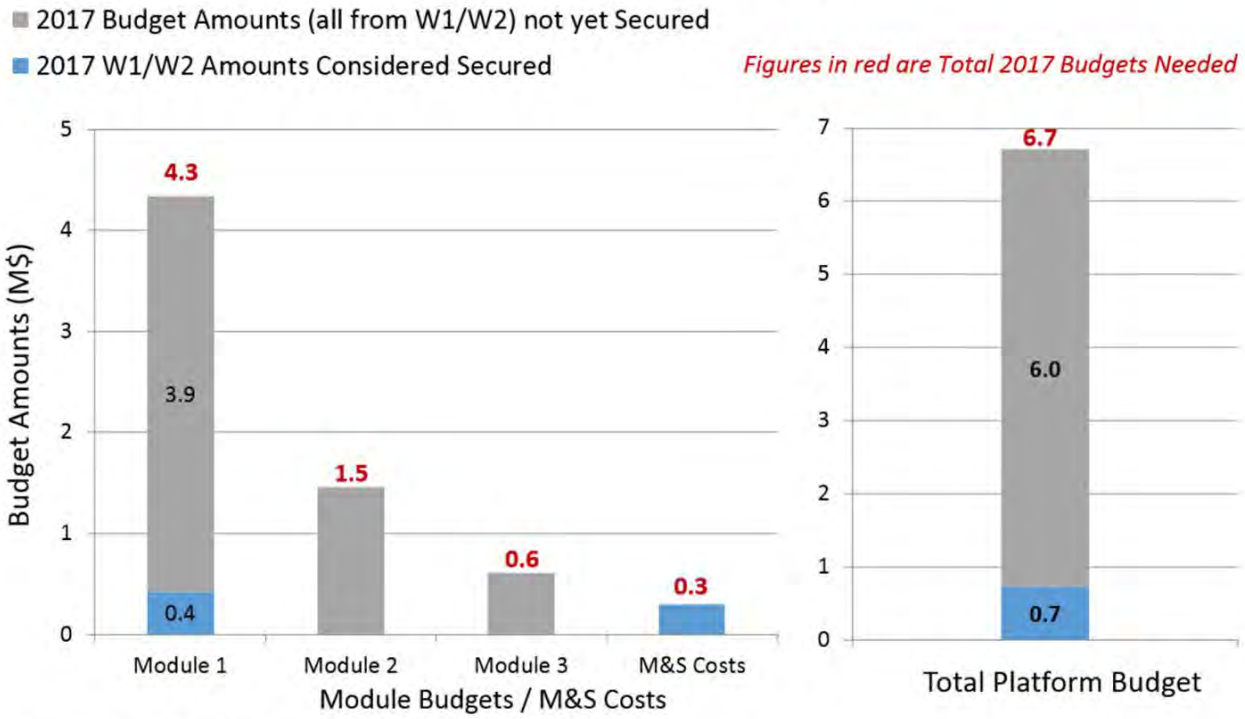
ISPC PLATFORM RATING[1]: A

1. Summary

- The social value of the data and knowledge products generated by CGIAR is arguably comparable to that of the content of the genebanks. This strongly suggests that CGIAR has dramatically underinvested in the curation and maintenance of data. This is the time to seize the opportunity to capitalize on these assets, since recent developments in linked open data and food systems ontologies are creating new and favorable conditions for achieving the objectives of this platform. The field is changing so fast that the only way to stay on the edge is to be invested and involved in these processes, which largely occur outside CGIAR.
- This is a strong proposal for a platform addressing a crucial and long-standing weakness. The proposed platform is an important means of improving CGIAR system level performance with good potential to generate System-level benefits. The original budget proposal was judged as inadequate to support the desired aims and did not reflect the importance of the topic. As suggested by the ISPC, the revised proposal keeps a base budget and has added an alternative "uplift" scenario with a budget 83% higher than originally proposed, broken down in a modular manner to help prioritization under a limited funding scenario.
- CGIAR and its partners have generated a rich and complex mix of multi-location, multi-disciplinary data and associated information. There is wide recognition that more could, and must, be done to ensure that these data are made accessible for sharing, interrogation, or repurposing – and that this would represent a significant IPG. Furthermore, the nature of CGIAR's research is so data-driven and data-intensive, that a coherent and strategically positioned coordinating platform on Big Data and ICT is essential and timely.
- In the guidance for pre-proposals for Phase II of the CRPs, it was noted that a number of scientific organizations have already invested in data capabilities and infrastructure. This creates an opportunity for CGIAR to leverage this investment to advance the global public good mission of CGIAR, in coordination and alignment with these international stakeholders. The platform aims to increase the impact of agricultural development by embracing Big Data and ICT approaches to solve research for development problems faster, better and at greater scale. As outlined in the SRF, this will initially be across CGIAR, but is extensible to agriculture at large.
- The Theory of Change of the platform focuses on increasing the capacity of CGIAR and partners to embrace Big Data and ICT approaches. The platform's strategy focuses on collaboration between CRPs and centers, leveraging external expertise to enable unrestricted discoverability of linked open datasets. Through the "INSPIRE" module, Big Data pilot projects will be launched.
- The proponents of the Big Data platform have responded positively to the ISPC suggestions for strengthening the original proposal, and have satisfactorily addressed all concerns raised.

[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

Big Data 2017 Module and Platform Budgets:
Secured W1/W2 Amounts and Shortfalls (US$M)



Data Source: CGIAR System Management Office

2. Assessment of the Platform response to the ISPC major comments

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
1. The ISPC suggests that the proponents provide a revised proposal that includes development of **two budget scenarios**: (1) the current baseline budget; and (2) a significantly higher budget, with associated elaboration of activities for each.	Specific adjustments were made to the baseline budget to address ISPC suggestions (adding funding for a core computer scientist, secretariat operations, international board functions, etc). The proposal now includes a significant "uplift scenario" budget for secretariat personnel, supplies, and services; to double the INSPIRE project and impact assessment funding; private sector collaboration on farm management decision-support systems; use of cloud-based infrastructure; data science and curation; ontologies; high-throughput phenotyping analytics; and a drone imagery platform.	**Satisfactorily addressed.** The Big Data team deserve praise both for their realistic approach to budgeting as well as for their response to the ISPC suggestion. The additions to the baseline budget required to respond to the specific ISPC suggestions resulted in an increase of 0.77%. The uplift budget (83% above the base budget) is a significant increase in R4D and other platform activities, which is clearly spelled out in the addendum. If even a sub-set of these uplift activities can be funded, this would be worthwhile, and the modular approach to most of the uplift is a practical compromise between the funding in hand and aspirations to achieve full potential of the platform.
2. Fully realizing the opportunities of the Big Data Platform requires **additional computer / data scientists** as part of the core staff team and hence additional budget for professional staff.	Additional computer scientist included in the base budget as a core member of Module 2 (CONVENE).	**Satisfactorily addressed.**

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
3. A section is needed to address **ethical considerations** in relation to the requirement for IRB approval before data are published.	New annex 8 (one page) and costs for a community of practice added in the uplift budget.	**Satisfactorily addressed.** The approach in Annex 8 is a satisfactory response to the ISPC concerns regarding this challenging and urgent issue, but arguably the level of ambition should still be higher. The ISPC agrees that ethical issues are likely to grow, but also feel they must be addressed from the outset in the establishment of the platform. The four bullet points elaborating on topics to be considered by the CoP are: • the use of genetic resources and traditional knowledge associated with such • research involving animals • participatory research approaches and the promotion of farmer's rights • biosafety risk assessments These are all important, but none of them fully address the challenge outlined here. The more the CGIAR moves towards common research sites with trans-disciplinary work, the more the various sectors of research will need to understand that taking human subjects research seriously will require them to adjust sample sizes, adopt different methodologies for study design, and incorporate their engagement with farmers/herders into approval processes that they then have to stick to. While the CoP may work on these issues, the real question is how CGIAR institutions and CRP leaders will be brought on-board to tackle these critical research process issues.
4. Plans for **Big Data analytics** need to be mapped out more clearly.	Priorities based on the results of a Montpellier workshop have been added to the proposal for selected topics. There is now a greater emphasis on INSPIRE projects (aligned with CRP priorities) as vehicles for data analytics.	**Satisfactorily addressed.** The steps are realistic and appropriate. The ISPC also would like to endorse the proponents' argument that "it is however important not to overly prescribe these topics, but rather ensure that they are demand driven by the AFS and integrative CRPs, and fully embedded in their workstreams." It seems likely this articulation with CRPs could be a challenge, but we agree it is indispensable and could make or break the platform.

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
5. An outline of the process of **curation, quality review and certification** of data should be provided (not more than 1 page) in the annex to the revised proposal.	One-page appendix 9 was added along with budget lines to support the activities described.	**Satisfactorily addressed.** As with the treatment of ethics in appendix 8, it is difficult to do justice to this complex (and often frustrating) topic in a single page. However, also like ethics, it is important to have these issues documented in the proposal, together with some concrete and highly appropriate steps intended to address these issues. Though the budget has been augmented in line with these activities, the CGIAR has not had a good record in these areas and it is hoped (finally) that sufficient funding will be committed to make significant progress. While modularity in the uplift budget is sensible for most areas (assessment in point 1 above), this is an area of urgent need in which critical mass likely is needed to achieve necessary results, and so should be given high priority in funding decisions.
6. ISPC recommends setting up an **Executive Management team**, including the platform coordinator (PI) and leaders (co-PIs) of each module.	Added to the proposal (as a short paragraph on p. 10 in Section 1.0.5).	**Satisfactorily addressed.**
7. ISPC recommends creating an **International Advisory Board** with representatives of relevant initiatives around the world.	Added to the proposal (as a paragraph on p. 11 in Section 1.0.5) and the proposed budget has been adjusted for these costs.	**Satisfactorily addressed.** Including the intention of involving representatives of the key international initiatives.

Independent Science and Partnership Council

14 September 2016

ISPC Assessment of the Excellence in Breeding Platform (EiB) revised proposal (2017-2022)

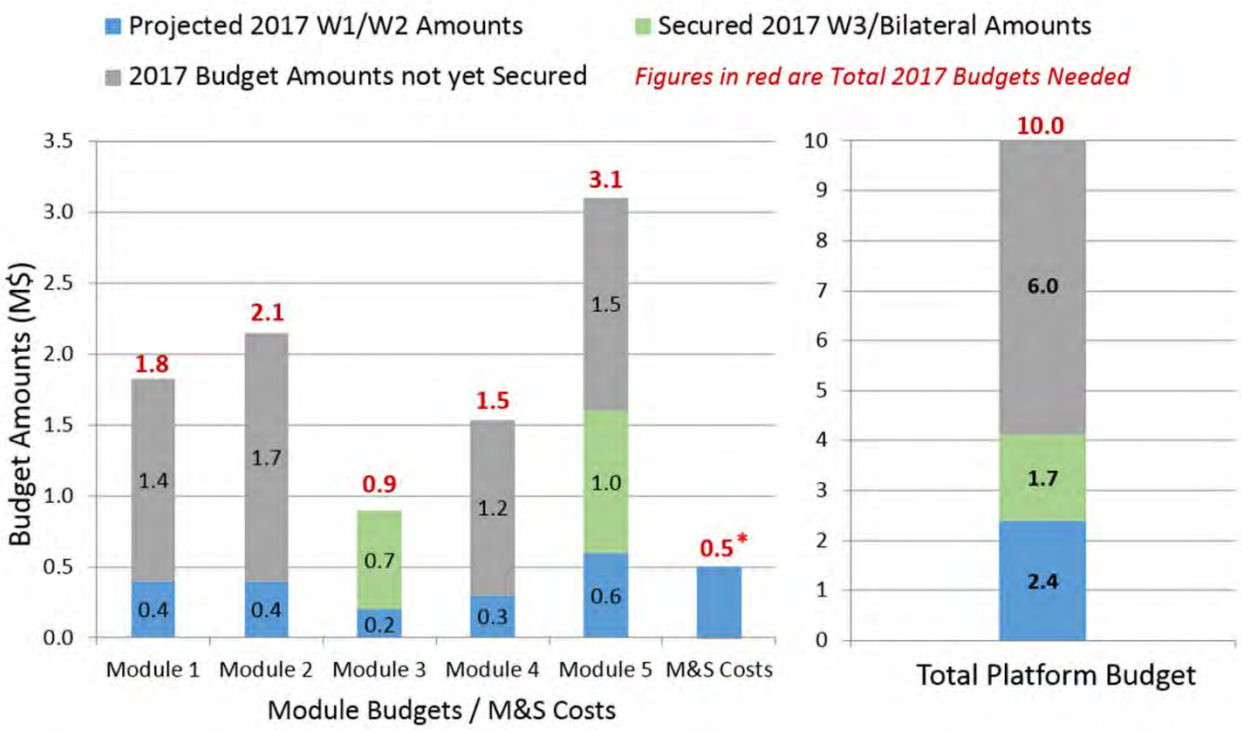
ISPC PLATFORM RATING[1]: A-

1. Summary

- This Platform has strategic relevance for the CGIAR; there are important reasons to look for the synergies in breeding and genetics programs across the system. Increasing the efficiency and technical quality of these multiple programs is critically important for the CGIAR. The proposal makes a convincing argument that there are economies of scale, and that many individual breeding programs in the System are too small to make full use of key genetic and genomic technologies or to keep up to date with the most advanced equipment and expertise.
- Crop improvement programs coupled with the genetic resource collections have been the greatest strength of the CGIAR system. This Platform seeks to add value to these activities by enhancing the ability of improvement programs to access and apply new technologies. The CGIAR is the most important source of publicly provided breeding germplasm (cultivars, lines, populations) for the developing world, particularly in low and lower-middle income countries (which grow 45% of global area for major staples and where 48% of the world population lives, of which 84% are poor).
- This Platform demonstrates comparative advantage as it shows how the collaborating CGIAR Centers and AFS CRPs may add value by working together (including with breeding programs in national systems). It pursues the use and procurement of technologies and common services that will contribute to its objectives for economy of scale. The platform's contribution to value addition will be highly dependent on the quality of the selected leadership.
- The Platform is expected to add value to the AFS CRPs by changing CGIAR breeding approach(es) through identification, development and promotion of best practices. The workflow will also be linking to the Genebank and Big Data Platforms, the AFS CRPs, and national breeding programs to ensure data sharing.

[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).
A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.
A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.
B+: Good – a sound research proposal but one which is largely framed by 'business as usual' and is deficient in some key aspects of a CRP that can contribute to System-wide SLOs.
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.
C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.

Excellence in Breeding - 2017 Module and Platform Budgets:
W1/W2 Amounts, W3/Bilateral Amounts & Shortfalls (US$M)



* *includes bilaterally-funded M&S Costs in the amount of US$0.4 M*

Data Source: CGIAR System Management Office

2. Assessment of the Platform response to the ISPC major comments

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
1. Consider changing the name of the Platform to avoid potential misinterpretation with one of the key objectives of the portfolio, while reflecting the primary purpose of this Platform.	Renamed as "Excellence in Breeding Platform" with a subtitle telling "Tools and services that create synergies and accelerate genetic gains of breeding programs targeting the developing world." Text and figures adjusted accordingly.	**Satisfactorily addressed.** The proposal has taken the suggestion of the ISPC into account, but there are still concerns over the tendency for the language of "genetic gain" to pop up in the proposal (more than 60 times, not counting references and CVs).
2. The ISPC recommends that proponents provide an analysis of funding scenarios, and in particular the use of W1/W2 funds versus bilateral grants and W3 funding for the Platform as well as the participating AFS CRPs. The analysis should include a discussion of the management costs, justifying the high proportion of the budget or reducing it, and taking into account that that the costs of applying a new strategy that may require additional populations, new infrastructure and staff time allocation may be a significant impediment.	Proposal includes Table 12 for base budget, Table 13 for uplift budget and Table 14 showing scenarios for [W1 + W2] only versus using [W1 + W2] only if W3 and bilateral funding becomes available (as noted in Table 15 by increasing it from US$ 2 million to US$ 10 million). Further details are given in addenda response to the sub-commentary regarding management costs. The changes are clearly noted to follow up in proposal's budget tables.	**Partially addressed.** Proponents acknowledge that this platform, to succeed, needs to raiseW3 and bilateral funding to end with a platform budget of US$ 15 million. However, that seems to be "hopeful thinking" because they do not give any realistic ideas on how to obtain such extra funding. Proponents give explanations in depth on how changes, which lead to savings in management to strengthening the entry point of the platform; i.e., Module 1 (Breeding Program Excellence), as well as budget shifts to follow the recommendation from reviewers regarding support to small breeding programs to implement change.
3. Adjust the assessment process and metrics to take into account variations in the stage of development, available resources and target regions for the different commodities for Module 1 (Breeding Program Excellence).	There were budget changes and shifts to related Agrifood Systems CRPs and within the platform to ensure staff time allocation does not affect small program (Module 1) and more resource to become available for translating and validating genotyping techniques in their crops.	**Partially addressed.** Proponents address this commentary through adjusting the budget but they do not take into account that it also refers to adjusting the process and metrics considering the breeding programs' stage of development and target population of environments for the various crops, particularly those in RTB and GLDC CRPs.

Independent Science and Partnership Council

CGIAR

14 September 2016

ISPC Assessment of the revised proposal for the Genebank Platform phase 2 (2017-2022)

ISPC PLATFORM RATING[1]: A

1. Summary

- CGIAR genebanks conserve, by far, the world's most genetically diverse and widely disseminated collection of germplasm available under the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Between 2012 and 2014, CGIAR genebanks distributed 94% of the reported germplasm under the ITPGRFA.
- CGIAR genebanks are key to the conservation and exchange of plant genetic resources for food and agriculture and SDG targets. Climate change and changes in insect and pathogen population dynamics will further increase the importance of genebanks to the future of agriculture.
- The record of accomplishment of the Genebank Platform team is impressive and the credibility of the team high. They are lead experts in relevant domains and represent the appropriate skills and experience to ensure the delivery of the proposed work.
- Although the core of the CGIAR research products are increasingly generated by the AFS CRPs, developments in science and technology, conservation standards, collecting requirements, value-adding activities, require a unified response. This is even more important in respect of the increasingly complex policy environment shaping the conservation, use, and benefit sharing conditions in the area of plant genetic resources for food and agriculture. A collective approach to conservation and use of the plant genetic resources held in the CGIAR genebanks, following a harmonized policy via the proposed Genebank Platform, will ensure an effective and efficient System-wide research infrastructure and will strengthen the CGIAR's role as a leading global player in this field.
- Key to the successful long-term management of the Platform is a streamlined and efficient Governance and Management structure. Given that the Genebank is a major enabler for global food security, it is critically important that physical, financial, political and reputational risks are appropriately recognised, managed and ultimately reduced. In this respect, additional clarity on the purpose of the various proposed committees and committee members will be required.
- The proposal makes the case that its work is synergistic with the CRPs, and shows how genebank information and outputs enable R&D outcomes related to achieving the SLOs. Delivery of the proposed outcomes in a timely manner, however, will also depend on the appropriate management of how risks and unforeseen developments.
- The Platform potentially provides a means for strong monitoring, evaluation, reporting and learning, as well as ensuring cohesion to achieve shared targets and to pursue quality management. The shared approach is expected to promote efficiency, the use of powerful tools and resources to access collections, the alignment of standards, and strong trust and transparency.

[1] A+: Outstanding - of the highest quality, at the forefront of research in the field (fully evolved, exceeds expectations; recommended unconditionally).

A: Excellent – high quality research and a strongly compelling proposal that is at an advanced stage of evolution as a CRP, with strong leadership which can be relied on to continue making improvements.

A-: Very good – a sound and compelling proposal displaying high quality research and drawing on established areas of strength, which could benefit from a more forward-looking vision.

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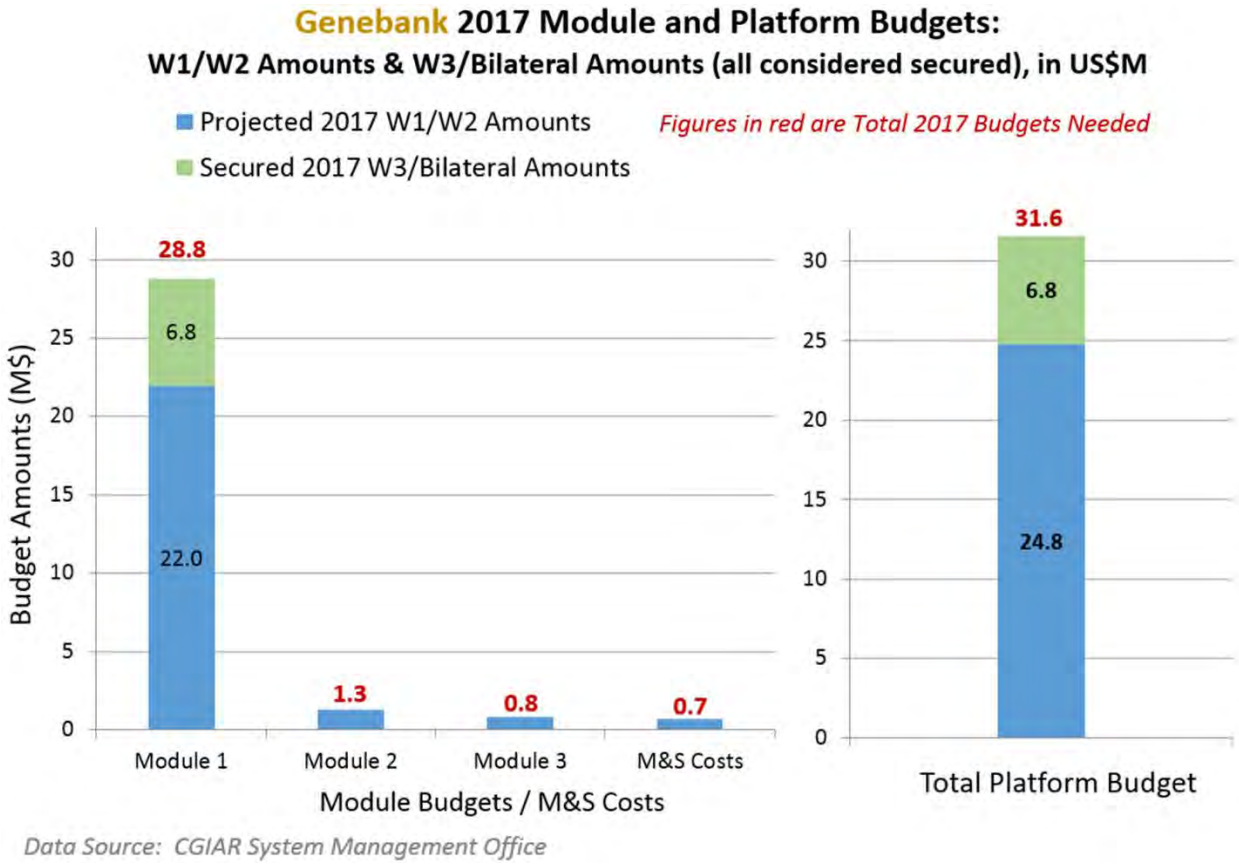
B: Fair – Elements of a sound proposal but has one or more serious flaws rendering it uncompetitive; not recommended without significant change.

C: Unsatisfactory – Does not make an effective case for the significance or quality of the proposed research.



Data Source: CGIAR System Management Office

2. Assessment of the Platform response to the ISPC major comments

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
1. Greater clarification of the prioritization and risk management strategy that the Platform has for collection, conservation and management activities.	Proposal Section 2.7 (pages 27-30) is revised Key points: • Risk management strategies will be published annually on the Platform website. • High level of risk management is of paramount importance to the sustainability of the collections and is the responsibility of the individual Centers. • The Platform has a role in supporting the strengthening and validation of these strategies. • The risks and measures on implementation of Platform activities are described in Table 1. Although most risks listed are rated from low to moderate, the ones rated high are financial related ones. • Safety duplication of 90% of all accessions by 2022 indicated as one of the key performance targets.	**Partially addressed.** The governance that will oversee risk management as outlined in Table 1, however, needs additional elucidation: While the 'owners' of the risks are identified, it is not clear how accountability is assured.
2. Elaboration of the Platform's strategy to strengthen and expand partnerships, including its functional linkages with the AFS CRPs and other CGIAR Platforms.	Proposal Section 2.3 (pages 24-25) is revised and Table 2 (pages 120-125) in Annex 4 provides detailed linkages and mechanisms between the Genebank Platform and the AFS CRPs, other Platforms and other users for the achievement of specific Module outputs. Key points: • Formal mechanisms and particularly the Excellence in Breeding Module Advisory Groups will support joint planning.	**Partially addressed.** The description of linkages with the AFS CRPs and CGIAR Platforms especially with the EiB (e.g in populating the germplasm collection of information with molecular data), however, would benefit from additional detail. In addition, whilst annex 4 is helpful, addition of a column that also details expected outcomes from these partnerships would clarify who benefits and how.

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
	• Through the Use Module, the Platform will engage with users, and flow of information back to the genebank. • The Platform is developing a communication strategy based on a website and newsletter that will give news updates, tools and information with the aim of creating awareness of the collections and building capacity and facilitating dialogue. • Stronger engagement with national genebanks. Reviewers, expertise and partnership are often sourced from national genebanks and other key partners.	
3. The Platform's strategy towards the broadening of the global Plant Genetic Resources for Food and Agriculture (PGRFA) information and data management partnership, including its role in capacity development.	Proposal Sections 1.0.4 (pages 14-15) and 3.1 (pages 39-40) are revised. Key points: • A process of systematically reviewing and updating the 17 published crop conservation strategies that are relevant to the CGIAR genebanks will be developed in coordination with the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the FAO Commission on Genetic Resources for Food and Agriculture. • Priorities will be set based on survey results across crops. • Thematic and regional capacity building events will be developed and implemented, bringing together specific areas of expertise from across all 11 Centers and key partners.	**Satisfactorily addressed.**

Initial ISPC comment (16 June 2016)	Platform response/changes proposed (31 July)	ISPC assessment (14 September)
4. The Platform's proposed governance and management structures.	• Proposal Section 1.0.5 (pages 15-17) is revised. Key points: • The Crop Trust Board membership is made up of four appointees from the Governing Body of the ITPGRFA, one from the CGIAR and one from the FAO, all with appropriate experience to guide the management of these international collections. • MoU, which lays out the roles and responsibilities of the Centers and the Crop Trust and their interactions with all System bodies, to be developed and agreed between the Crop Trust and CGIAR System. • Proposed that the Executive Director of the CropTrust reports annually the status of the genebanks against performance targets to the System Management Board. • The Independent Advisory Committee will be made up of seven members: four external experts, one representative from AFS-CRPs, the Genetic Gain Platform Leader and the Crop Trust Executive Director. The Management Team will comprise seven members: three A15 members, the Policy Module leader, GHU representative and the Platform Coordinator.	**Partially addressed.** The governance structure, however, requires more granularity than what figure 8 provides. As indicated before, it would be good to know, for instance, who oversees risk management. Given that the Genebank is a major enabler for global food security, it is critically important that we ensure physical, financial, political and reputational risks are appropriately recognised, managed and ultimately reduced. The current narrative seems to focus exclusively on the structure of the governance, but fails to convey the purpose of the various committees and committee members.