

Responses to review recommendations

In the following tables, relevant sections of the 2017 GLDC proposal are referenced and brief responses are provided to:

- Recommendations from the GLDC Expert Panel report to the CGIAR Systems Management Board (http://www.cgiar.org/wp-content/uploads/2017/04/SC4-05B_%20Expert-Panel-Report-on-GLDC-28April2017.pdf);
- Synthesis of Donor-perspective Reviews undertaken by the Fund Effectiveness Working Group (FEWG) on the 2016 GLDC proposal;
- The ISPC commentary on the 2016 GLDC CRP proposal (http://ispc.cgiar.org/system/files_force/ISPC%20commentary%20on%20GLDC%20proposal%20of%2031%20July%202016.pdf?download=1); and
- ISPC “must-haves” as requested in proposal stages leading up to the 2016 GLDC submission.

CRP Narrative			
Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel			
13	A more convincing argument, in the text and as presented in the Theories of Change, demonstrating strong complementarities between both cereals and grain legumes, and lines of research to underpin the value of a single coherent CRP	Cereal-legume synergies (p.4); 1.3 Impact Pathway and Theory of Change (p.13); Flagship Program 3 (FP3): Integrated farm and household management (p.53)	Complementarities between cereals and grain legumes is argued in the overview with explicit rationale. This is further addressed in FP3. The argument adopts the rationale of the Expert panel report and adds the synergies in access to research infrastructure located in the target ecologies.
15	Crop and theme priorities should be reflected in data on how resources will be allocated, including both financial and FTE budgets	1°, 2° order and spillover priorities (p.10). Table 8: Total CRP budget by flagship (p.26)	Budget narrative offers a description of prioritization process resulting in 1°, 2° order and spillover priorities. CRP budget is largely a consequence of mapped bilateral resources from partner institutions.
62	A single CRP should consolidate and lead CGIAR research on the cereal and grain legume crops in the semi-arid and sub-humid drylands of SSA and South Asia. To distinguish the new CRP from GLDC, as well as from its precursor CRPs, center partners should consider branding the new program Dryland Cereals and Legumes (DCL).	GLDC proposal and supporting documents accessed at http://crp-gluc.icrisat.org/	Partners and stakeholders were surveyed on naming of the CRP with overwhelming support for GLDC. The rejected first submission in 2016 had been named DCL.

63	A new proposal for this work should be developed, solidly based on additional analyses, broader consultations and expanded partnerships	GLDC proposal and supporting documents accessed at http://crp-glhc.icrisat.org/ .	ICRISAT commissioned 10 reports to support the GLDC proposal. Partnerships are expanded, with CSIRO now leading FP2 and partners invited to co-lead CoAs.
64	The panel strongly recommends that adequate human and financial resources should be mobilized and allocated to the rapid preparation of a sound, forward looking CRP strategy and, if approval is granted, that the revised CRP be fully supported by the CGIAR	GLDC proposal and supporting documents accessed at http://crp-glhc.icrisat.org/ .	ICRISAT Board committed up to US\$0.25M to undertake strategic studies and underwrite the CRP proposal development, including provision for meetings, consultant fees and operating costs.
FEWG			
	The proposal would be strengthened and anchored by clearer problem statements in FP1 and FP2 to drive the crop improvement and systems research programs (FPs 3-5).	Section 1.5: Program structure and Flagship projects (p.18), including Figure 6: Connections between GLDC FPs. 1.7 Partnerships and comparative advantage (p.21). FP1: Priority Setting And Impact Acceleration (p.25). FP2: Transforming Agri-Food Systems (p.39).	Interactions between FPs are articulated throughout the proposal. FP2 is now led by CSIRO and has commitment from a range of Development and Private sector partners. FP1 has established strong links to CRP-PIM who participated in GLDC development meetings and drafting of FP1 and FP2.
	It is not clear that development outcomes beyond directly involved farmers will be met	FP2: Transforming Agri-Food Systems (p.39). FP3: Integrated Farm And Household Management (p.53)	Development partners have been engaged in the design of the project to ensure that GLDC outputs are scaled through NGOs, private sector (see list of partners) and aligned to national priorities.
	The proposal could also benefit from greater emphasis on supporting national priorities and institutions, which will drive change in the agrifood system addressed, and more specificity on the approaches used to address the identified gender considerations	1.1f: Alignment with regional, country, industry and CGIAR priorities (p.10). 1.3 Gender (p.16) CoA 1.3: Gender integration and social inclusion in the drylands (p.36) Annex 3.4: Enhancing gender integration and social inclusion in the drylands (p.91) Supporting paper "Cross-coordination with Sub-Regional Organizations to Maximize Scale and Impact" accessed at http://crp-glhc.icrisat.org/	Alignment with current strategies of Apex and SRO's in SSA and SA is a key component of the prioritization process for GLDC. GLDC was presented at the FARA Science Agenda for Agriculture in Africa (S3A) meeting (Accra, Ghana 26-28 July 2017). Meetings on GLDC were held with CCARDESA, ASARECA, CORAF/WECARD and leaders of NARES. Gender is addressed in the overall proposal and in each FP program. Moreover, a specific COA1.3 on gender research is an important component of the proposal.

	Benefit from a synthesis of the diagnostics for underperforming systems and more detail on implementation details such as science platforms to be used. Many of the identified constraints have been known a long time, and the proposal would benefit from a stronger presentation of how it will build on previous work around technology adoption in the GLDC crops. Greater specificity in the treatment of issues with respect to value chains, the enabling environment, climate change, demand, actors targeted, etc. would be helpful.	Section “Past research and lessons learned” (p.4) ICRISAT commissioned a report on “Assessment of Past Performance and Lessons Learned” which can be accessed at http://crp-glhc.icrisat.org/ FP2: Transforming Agri-Food Systems (p.39).	Lessons are integrated into the design of GLDC with additional emphasis placed on demand-driven innovation and aligned to national priorities. FP2: Transforming Agri-Food Systems provides rationale for research investment in value chains and the enabling environment, citing examples of demand from key change agents who will direct where intervention will be targeted.
	The aspiration for dynamic engagement with activities across the CRP is clearly articulated, but how this will be achieved is less clear.	Section 1.5: Program structure and Flagship projects (p.18).	Figure 6 provides an articulation of the types of information flow between GLDC FPs.
	Reviewers were not fully convinced of the comparative advantage for GLDC in the addressed domain. Other sources of supply (and natural partners) are found within in the CGIAR and beyond, including Legume, Peanut, Sorghum/Millet USAID Innovation Labs. It is not clear that the CGIAR has a natural role in country systems development, markets research, and livelihoods work within national boundaries, apart from capacity building of NARS – a more appropriate role might be building the capacity of NARS to do this work themselves.	1.7 Partnerships and comparative advantage (p.21) 1.8 Evidence of demand and stakeholder commitment (p.23). FP2.1: Rationale and scope (p.41)	The proposal argues that GLDC has comparative advantage through internal CGIAR capabilities and via its strategic partnerships. Two recent reviews, led by Tom Walker and Peter Matlon, endorsed a GLDC proposal led by ICRISAT. They conclude that the CGIAR is best equipped to lead an international R4D program addressing the target crops and ecologies. Six USAID Feed the Future Innovation Labs agreed to support GLDC. CSIRO from Australia and CIRAD and IRD from France committed to co-fund GLDC and to lead FPs and CoAs. The GLDC approach to scaling is to accept the invitation of partners, who already run large development programs in target agroecologies, for inviting access to GLDC modern crop varieties, technical advice, evaluation and cross-program learning (p.42).
ISPC commentary on 2016 GLDC submission			
	We accept that this is a compelling vision in many respects, but it is not clear how this vision maps onto the set of commodities that this CRP has chosen, nor is it clear that the CRP has the capability of delivering on this	GLDC proposal and supporting documents accessed at http://crp-glhc.icrisat.org/ .	Development partners were engaged in the GLDC design to ensure that outputs are scaled through NARES, NGOs and private sector, and are aligned to national priorities. Partnerships are expanded in the nutrition and IT

	vision across the entirety of its target zone and on all the crops. ... It is not clear that the CGIAR (and in particular this CRP) has the most suitable collective professional skills and correct set of tools to alter the institutional environment around legume and dryland cereal farming systems		sectors. CSIRO, CIRAD, IRD are co-investing in the CRP and leading key components. Prioritization brought in 1°, 2° order and spill-over priorities in the crop x country x trait combinations. We have gone from over 1000 possible combination in the 2016 submission to less than fifty 1° order priorities in the new GLDC. GLDC is explicit in addressing the enabling environment around legume and dryland cereal farming systems – the section on lessons learned argues this case (p4). A range of tools and approaches to do so is provided under CoA2.2: Tools, models and processes to support at-scale innovation.
	The document now places surprisingly little emphasis on the grand challenges. There are cursory mentions made of climate change, but other grand challenges receive little attention.	GLDC proposal and supporting documents accessed at http://crp-gluc.icrisat.org/.	A greater emphasis has been placed within the theory of change and individual flagships on how GLDC will contribute towards the SRF and SDGs. Emphasis has been given on technologies that will improve resilience to climate change, improving nutrition through diversified diets, and developing technologies that enable farmers to access profitable markets.
	The overall ToC is, however, still poorly defined. Two impact related pathways are described. First, that research will lead to household impacts through direct channels such as farm productivity and market opportunities; and second, that research will affect households indirectly by providing integrated technological, institutional and policy solutions. Bringing about change through both these channels seems to hinge on a number of untested assumptions and to embody an ambitious agenda for addressing many problems over which the CRP has limited control	Section 1.3 Impact Pathway and Theory of Change (p.13)	Indeed, the GLDC program is an ambitious agenda, and so it should be for CRPs addressing grand challenges and the SLOs/SDGs. The revised ToC triangulates between theory, GLDC goals and the context of smallholder farmers. The first proposed pathway, therefore, shall lead to household impacts through improved farm productivity and farmers participating in markets. Through the second pathway, the consortium of partners works towards systemic change that enables agrifood system actors themselves to drive reforms. Such change will be essential to scale and sustain impacts. Because CGIAR research in isolation will not bring about such change, the GLDC program explicitly works with public and private sector partners holding strategic leverage. As such the program shall lead to the GLDC outcome of <i>“Improved capacity and inclusivity of agri-food</i>

			<i>system stakeholders to collaboratively develop innovations that respond to the needs of women, men and youth in GLDC-based livelihoods and value chains". Both pathways state in detail assumptions to be tested during the implementation of the project.</i>
	The argument for the redesign is clear but the narrative lacks sufficient insight as to how the changes are to be achieved. The proposal explains how a prioritization process has been used to identify targets for commodity improvement but it is not clear how this may fit with the parallel emphasis on developing an innovations systems approach. This is especially a concern since the innovation systems approach requires stakeholders as well as GLDC researchers to decide the intervention options.	1.1 Rationale and scope (p.1) FP2: Transforming Agri-Food Systems (p.39).	In response to the recommendations of the Expert Panel and directions from the SMB, GLDC is targeted at increased productivity, profitability, resilience and marketability of critical and nutritious grain legume (and cereal crops grown within the semi-arid and sub-humid dryland agroecologies of sub-Saharan Africa and South Asia. Within this framing, FP2 will implement an innovation systems research approach where GLDC is invited into initiatives by scale out partners.
ISPC "must-haves"			
ISPC-4 DC	Do an analysis of current work to identify barriers to adoption and shifting to new areas of innovative research and approaches to overcome these barriers.	Section "Past research and lessons learned" (p.4)	<i>Ex-ante</i> analysis in FP1 will be used to capture key learnings on barriers to adoption from a gender perspective and policy perspectives. FP2 will look at innovations systems based on past successes to better understand scaling.
ISPC-1b GL	Undertake a comprehensive assessment of past research efforts and current barriers to adoption of technology, as a basis for identifying key constraints and opportunities that could be influenced by CRP 3.5 research products	Section "Past research and lessons learned" (p.4) ICRISAT commissioned a report on "Assessment of Past Performance and Lessons Learned" which can be accessed at http://crp-gldc.icrisat.org/	Lessons are integrated into the design of GLDC with additional emphasis placed on demand-driven innovation and aligned to national priorities.
ISPC-3 GL	Given limited success to date in the adoption of improved GL technologies, demonstrate feasible impact pathways, citing relevant references and documentation	Section "Past research and lessons learned" (p.4) Section 1.3 Impact Pathway and Theory of Change (p.13). FP ToC sections (p. 31, 44, 55, 66, 78)	Level of referencing has increased with each FP providing evidence of impact pathway supported by literature and past experience.

FP1

Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
1	A rigorous profile of poverty, food insecurity and malnutrition compared to other major regions of the world, including information on past trends and future projections; the importance of the major crops to low income producers and consumers, women and youth, and how these are changing over time with urbanization, changing consumer preferences and emerging trade opportunities.	Current and projected challenges (p.2) ICRISAT commissioned a report on “Overview of Poverty, Food Security, and Malnutrition in SSA and South Asia” which can be accessed at http://crp-gldc.icrisat.org/	Poverty, food insecurity and malnutrition is profiled alongside other major regions of the world.
2	Results of foresight analyses examining likely changes in supply and demand for the major dryland crops over the next 10-20 years to estimate impacts on prices and the incidence of poverty and food insecurity across countries.	Current and projected challenges (p.2) Section 1.1c Foresight analysis (p.7) ICRISAT commissioned a report on “Foresight analysis for Grain Legumes and Dryland Cereals (GLDC)” which can be accessed at http://crp-gldc.icrisat.org/	Foresight analysis was used in concert with Value of production and crop traits to develop prioritized matrix of country x crop x traits to maximize return on investment in GLDC.
8	Rigorous assessment of past research progress, highlighting successes and failures, both to benchmark projected gains, and to derive strategic and tactical lessons to guide future program design.	Section “Past research and lessons learned” (p.4) ICRISAT commissioned a report on “Assessment of Past Performance and Lessons Learned” http://crp-gldc.icrisat.org/	ICRISAT commissioned report on “Assessment of Past Performance and Lessons Learned” provides learning from both successful and unsuccessful past R4D investments. These lessons influenced the proposal – e.g. ensuring the enabling environment is in scope.
9	Drawing on yield gap analyses and probable adoption patterns, ex ante impact assessments of the major lines of technical research, by crop, constraint and zone. Comparisons with the results of ex post impact assessment to test realism.	Section “Ex-ante evaluation of research and technology options” (p.8) IITA-led report on “Ex-ante Evaluation of Research and Technology Options” http://crp-gldc.icrisat.org/	Requested <i>ex-ante</i> analyses undertaken as per CRP-RTB approach. Initiated by a survey of crop breeders and researchers on yield gaps and lines of research. Draft results reviewed and inputs adjusted before finalization. Planned to continue analyses in early GLDC implementation as per report recommendations.
10	Combining the results of Recommendation 9 above with price projections from foresight analyses, calculation of returns on investment for major new lines of research.	Table 4 (p.11) IITA-led report on “Ex-ante Evaluation of Research and Technology Options”	Projected economic benefits of the different lines of research are presented in terms of the net present value (NPV), IRR and benefit-cost ratios (BCR).
14	Priority setting at crop, country and thematic levels must be more dynamic	Prioritization section (p.6)	Prioritization for GLDC provided metrics on poverty prevalence, agroecological

	and forward looking, systematically incorporating results of foresight analyses, including projections from climate change models.	1°, 2° order and spillover priorities (p.10)	statistics, value of crop production, foresight projections of significant demand and/or deficit in supply, ex-ante return on research investment, consideration of quality, market and environmental traits and alignment with stakeholder priorities. This work will continue in GLDC implementation.
16	Crop and theme priorities should be informed by data on how the importance of priority crops and production constraints varies across different semi-arid and sub-humid agroecologies and farming systems, and refined to smaller and better specified zonal environments to better design and target research initiatives.	Hyman et al. (2016) Report on “Characterization of GLDC Mega-environments” and IITA-led report on “Ex-ante Evaluation of Research and Technology Options” http://crp-glhc.icrisat.org/	The semi-arid and sub-humid dryland agroecologies — agro-pastoral millet/sorghum, pastoral, rainfed mixed and dry rainfed farming systems, as per FAO characterization — are where GLDC research will be planned and implemented.
18	Target countries should be selected in part on the basis that they represent important agroecologies and farming systems across geographies in the semi-arid and sub-humid drylands so as to improve efficiency and impact when transferring results.	Prioritization section (p.6) 1°, 2° order and spillover priorities (p.10) Table 4 (p.11)	An incomplete matrix of ‘region x ecology x country x crop x breeding trait’ resulted in nominated 1° order priorities in 13 target countries. It is important to note that GLDC includes mapped bilateral projects in different countries. These 2° order priorities contribute to the GLDC impact targets and will benefit from and contribute to the GLDC R4D portfolio.
19	Crop and thematic priorities need to be informed by rigorous yield gap analyses, ex ante impact analyses and ROI projections, benchmarked against past results.	Prioritization section (p.6) 1°, 2° order and spillover priorities (p.10)	As stated for rec 14.
23	The heterogeneity across the semi-arid and sub-humid drylands of SSA and South Asia should be more systematically analyzed and used to construct a typology of relatively homogeneous zones. The typology should be used to frame the research agenda of each FP to ensure that CoAs are adequately customized to address context-specific needs. The typology should be constructed with reference to agroecology, farming systems, crop mega-environments and relevant economic parameters.	As for rec 16.	As stated for rec 16.
24	An initial typology, based on existing data and informed by regional and national priorities and plans, should be developed early in the formulation of the next proposal, and its results used	As for rec 16.	As stated for rec 16.

	to guide initial priorities and lines of work within each FP.		
26	Clarify the methods that will be applied to conduct both ex ante and ex post impact analysis of work on markets, institutions and policies, as well as in mixed crop-livestock systems.	IITA-led report on “ <i>Ex-ante</i> Evaluation of Research and Technology Options” http://crp-glhc.icrisat.org/	A detailed description of the methodologies is provided with references to already existing studies.
41	The CRP leadership should approach IFPRI/PIM as soon as possible to explore opportunities to collaborate closely in FP1 and FP2, and to quickly develop agreements to engage IFPRI/PIM in expanded roles as described in the text.	1.6 Cross-CRP collaboration and site integration (p.20).	Link with CRP-PIM FP1 ‘Technological Innovation and Sustainable Intensification’ is established. CRP-PIM / IFPRI researchers joined the GLDC FP1 team for pre-proposal analyses.
FEWG			
	Reviewers were not fully convinced that the CGIAR has a comparative advantage for the work described in FP1 and FP2.	FP1: Priority Setting And Impact Acceleration (p.25).	FP1 has established strong links to CRP-PIM who participated in GLDC development meetings and drafting of FP1 and FP2.
	The proposal would be improved by explicit diagnosis of specific constraints for crops/systems by country/region, to justify the research, policy, and delivery investments and support behavior change.	Prioritization section (p.6) Supporting documents http://crp-glhc.icrisat.org/	A stepped process of diagnosis and prioritization was undertaken to establish priorities for GLDC.
	Good logic is evident in the articulation of impact pathways, but greater precision in research questions and hypotheses for specific crops, systems, and areas would be helpful	FP1.2 Objectives and Targets FP1.3 Impact pathway and Theory of Change (p.31).	Specific research questions are articulated for each CoA.
	Reviewers’ low scores reflect the difficulty in establishing a clear sequence on how the learning from this flagship will feed into the other FPs’ research when needed. This flagship should be provisioned to produce its results over 2-3 years, rather than 5 years. Its work is foundational to MEL across the CRP to enable targeted and adaptive investment, but greater specificity in how the outcomes of this flagship will be assessed would be helpful. Greater specificity in research outcomes by crop, farming system, and country would also improve the proposal; given the many crops, target countries, and spill-over countries, a generic approach is not adequate	Section 1.5: Program structure and Flagship projects (p.18).	Figure 6 provides an articulation of the types of information flow between GLDC FPs.
ISPC commentary on 2016 GLDC submission			

	Another emerging concern is the apparent tension between prioritizing crop x trait x country using the six step process which will involve considerable work and investment (based on the RTB experience) and the innovations system approach that asks the participants to decide the intervention options and GLDC researchers to contribute where relevant. More thinking is required as to how these two potentially conflicting approaches would interact	1.1 Rationale and scope (p.1) Prioritization (p.6). FP2: Transforming Agri-Food Systems (p.39).	In response to the recommendations of the Expert Panel and directions from the SMB, GLDC is targeted at increased productivity, profitability, resilience and marketability of critical and nutritious grain legume (and cereal crops grown within the semi-arid and sub-humid dryland agroecologies of sub-Saharan Africa and South Asia. Within this framing, FP2 will implement an innovation systems research approach where GLDC is invited into initiatives by scale out partners.
ISPC “must-haves”			
ISPC-1c GL	Establish targets for outcomes in a crop by region matrix to account for actual situations and current status from a regional and crop species perspective, and strengthen capacity to prioritize allocation of resources for GL research within this CRP and within the CGIAR	1.2 Goals, objectives and targets (p.17) Report on “Estimating Targets for GLDC” accessed from http://crp-gldc.icrisat.org/ .	Targets for GLDC are estimated using a described process. These targets were benchmarked against fellow CRPs and the published aspirational CGIAR and Partners' development targets for 2022 and 2030.

FP2			
Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
11	<i>Ex-ante</i> assessments and best-guess ROI calculations for proposed work on policy research and value chain development	FP2: Transforming Agri-Food Systems (p.39).	The work on policy research and value chain development is yet to be selected and depends on opportunities identified by partners. Such opportunities are intended to be assessed by FP1.
28	Explain more precisely how innovation systems approaches and innovations platforms will be used in work to improve the enabling environment, and how more conventional markets, institutional and policy analyses will fit into and complement the innovation systems approaches in FP2	FP2: Transforming Agri-Food Systems (p.39). FP2.3 Impact pathway and Theory of Change (p.44) FP2.6 Clusters of activities (p.47).	GLDC aims to improve the performance of agri-food systems for GLDC crops. FP2 will do this through development, testing, and scaling of interventions in action research with partners. Alongside this, FP2 will coordinate with FP1 and CRP-PIM who will lead in addressing key policy constraints impeding the development of targeted GLDC value chains.
29	Political economy methods should be considered to illuminate non-market forces driving decision making at policy levels in FP2	Section 1.3 Impact Pathway and Theory of Change (p.13) FP2.3 Impact pathway and Theory of Change (p.44)	The theoretical underpinning for GLDC is institutional theory.

41	The CRP leadership should approach IFPRI/PIM as soon as possible to explore opportunities to collaborate closely in FP1 and FP2, and to quickly develop agreements to engage IFPRI/PIM in expanded roles as described in the text.	1.6 Cross-CRP collaboration and site integration (p.20).	Link with CRP-PIM FP1 'Technological Innovation and Sustainable Intensification' is established. CRP-PIM / IFPRI researchers are in the GLDC FP1 team.
FEWG			
	Reviewers were not fully convinced that the CGIAR has a comparative advantage for the work described in FP1 and FP2.	FP2: Transforming Agri-Food Systems (p.39).	FP2 is led by CSIRO who has strong agri-food systems capabilities. CGIAR has relevant capabilities, especially in hard systems analysis and in agribusiness incubation (e.g. ICRISAT AIP)
	Limitations in scaling from research case studies to system wide interventions remains a significant challenge; even with high confidence that the flagship would achieve its research objectives for particular case studies (e.g. particular crops or markets / institutional settings in a target country), it is less clear how such achievements would then be scaled to work across agrifood systems without duplicating earlier investments for each new context.	FP2: Transforming Agri-Food Systems (p.39).	FP2 intends to achieve at-scale impact through provision of underpinning research expertise to scale-out partners that seek systemic change and the development of integrated design solutions to address market gaps and enhance market opportunities. Hard systems models / tools and peer-reviewed published learning are the critical IPG contributions of FP2.
	The proposal acknowledges the generic nature of the researchable questions, which will be refined for 6 agrifood systems to be identified. Given these uncertainties, it is not clear how impact numbers were calculated.	FP2.1: Rationale and scope (p.41) FP2.2: Objectives and targets (p.43)	FP2 is now introduced with a set of concrete examples on how R4D can contribute to transforming agri-food systems. Specific FP2 targets are nominated.
	The proposal would be improved by articulating the failure points that might be more or less amenable to research intervention, and greater specificity on how it intends to study context specific, local, national issues related to productivity, market access and governance and what household behavior, actions from actors of the value chains and public policies/institutions will be changed. Many of the suggested issues that will be addressed are not unique to GLDC crops and not necessarily addressed with this lens.	FP2.4 Science quality (p.46) FP2.5 Lessons learnt and unintended consequences (p.47) FP2.6 Clusters of activities (p.47)	FP2 framing has narrowed to primarily combine the power of a range of analytical tools and capacities (that are largely new to partners) with initiatives in targeted agri-food system already being run by scale-out partners.

	Reviewers were not convinced by the argument for comparative advantage. There are both other research providers engaged in understanding the agrifood systems in question and designing interventions as well as government and multi-lateral development agencies actively involved in institutional intervention to address system constraints. While the CGIAR has expertise and experience in the research issues canvassed here, they are at the margins of institutional comfort zone and competitive advantage.	FP2: Transforming Agri-Food Systems (p.39).	FP2 is led by CSIRO who has strong agri-food systems capabilities. CGIAR has relevant capabilities, especially in hard systems analysis and in agribusiness incubation (e.g. ICRISAT AIP) of which the reviewers may not be fully aware.
	Success will demand strong leadership and careful capacity development. It is not clear that ICRISAT, IITA, ICARDA and CIAT have a comparative advantage in value chain analysis, institutional capacity development and in-country policy analysis and their research programs in these areas have historically not been strong. The key assets of the CGIAR that are unique, and under leveraged/under resourced are the mandate crop germplasm collections, the ability to act regionally/address regional and global issues, rather than within countries, and to act as a science translator to leverage the billions of research dollars spent in developed countries on behalf of developing countries. While studying agrifood systems that are highly context-specific requires resources dedicated to each system, the case has not been clearly made on how the investment will be made to cover systems spanning multiple crops and countries.	FP2: Transforming Agri-Food Systems (p.39).	FP2 is led by CSIRO who has strong agri-food systems capabilities. CGIAR has relevant capabilities, especially in hard systems analysis and in agribusiness incubation (e.g. ICRIST AIP) CGIAR has other attributes and capabilities (other than breeding) leading to IPGs (e.g. global datasets; systems analytical tools) that can be leveraged across regional and global issues. It is for this reason that global companies such as Microsoft have sought partnership with CGIAR.
	Reviewers were not convinced that the proposed MEL approach will identify how the agrifood systems will improve performance following the research interventions. System-scale interventions of the type addressed in this Flagship inherently raise significant challenges in attribution of impact. While the MEL strategy presented should be able to address this, this issue isn't addressed per se in the	Annex 3.6 Results-Based Management (RBM) and Monitoring, Evaluation, Impact Assessment and Learning (MEIAL) (p.95)	The MEIAL plan for FP2 does need to accommodate this point. Such plan will be development as GLDC moves to implementation.

	proposal. Outcomes of the proposed research may be too broad to be helpful in making recommendations for governments to change their policies and for actors to change their behavior; greater specificity of research plans, metrics, and pathways linking research to outcomes would be helpful.		
ISPC commentary on 2016 GLDC submission			
	There seems to be very little thinking about how political and institutional reforms take place. In this sense, the ToC does not seem to be based on a careful or rigorous scientific argument. There is extensive discussion of “policy makers” and “policy change” and institutional design; but there is almost nothing in the document that would suggest that the CRP leaders understand the ways in which policy change actually takes place in their target countries – or the limits of the power exercised by policy makers	Section 1.3 Impact Pathway and Theory of Change (p.13) FP2.3 Impact pathway and Theory of Change (p.44)	The 2016 proposal did use repeatedly the phrase “institutional and policy issues”. However, the referral was to represent the arrangements and practices that constitute ‘norms and rules of the game’. Politics and government policies need to be considered, but addressing institutional arrangements was meant to be far broader than interpreted by the ISPC. The 2017 GLDC proposal tries to be clearer in its ambition and to acknowledge the need to work with partners in achieving institutional change.
	Another important change from the previous proposal is a much more pronounced focus on markets as a driver of change which is problematic. Agricultural markets in many of the target environments are fragmented and work poorly; these markets cannot easily be ‘unlocked’. Overall, the proposal needs considerable strengthening to be convincing from a social science point of view	Section 1.3 Impact Pathway and Theory of Change (p.13) FP2.3 Impact pathway and Theory of Change (p.44) FP2.4 Science quality (p.46)	The identified issues with market in the target ecologies is well recognized, hence FP2 framing and proposed research which is designed in the context of social science literature.
ISPC “must-haves”			
FC-5 GL	Further analysis is needed on possible trade-offs implied by the new emphasis on value chains; proponents need to consider location specificity that IPGs may be difficult to generate in deciding on which value chains to select for intensive research	FP2: Transforming Agri-Food Systems (p.39).	The exact work on value chain development is yet to be selected and depends on opportunities offered by partners. Such opportunities will be assessed by FP1 and FP2 as providing ROI and IPGs.

FP3

Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
3	A description of the extent and characteristics of semi-arid and sub-humid agroecologies in SSA and South Asia, including characterization of the climate and soils, predominant farming systems, alternative food and feed sources, population pressure and livestock numbers, the nature and dynamics of environmental threats to these ecologies including water and nutrient flows, and how these parameters vary across different sub-regions within those areas.	Hyman et al. (2016) Report on “Characterization of GLDC Mega-environments” and IITA-led report on “ <i>Ex-ante</i> Evaluation of Research and Technology Options” http://crp-gluc.icrisat.org/	Description of the semi-arid and sub-humid dryland agroecologies in SSA and SA is provided.
4	The results of climate change models that provide likely climate scenarios across the sub-regions, and what these mean in terms of production levels, risks, challenges and opportunities for major crop and livestock options	Current and projected challenges (p.2) ICRISAT commissioned reports on “Overview of Poverty, Food Security, and Malnutrition in SSA and South Asia” and “Foresight analysis for Grain Legumes and Dryland Cereals (GLDC)” accessed at http://crp-gluc.icrisat.org/	Current and projected challenges are articulated as requested.
5	Yield gap analyses for the major cereals and grain legumes by mega-environment	IITA-led report on “ <i>Ex-ante</i> Evaluation of Research and Technology Options” http://crp-gluc.icrisat.org/	Yield gaps for target crops and environments were included in the <i>ex-ante</i> analysis of research interventions.
7	Greater discussion of various types of risk in shaping farm-level decisions and their implications in developing risk mitigating techniques and institutional innovations	Links to grand challenges (p.54) FP3.4 Science quality (p.57) CoA 3.3 Testing, adapting and validating options (p.60)	Mitigating risk is a critical issue for FP3.
30	Household-level economic analysis should be used to assess the competitiveness of new technologies against competing enterprises and their impacts on whole household incomes and on risk management strategies in FP3	FP3.1 Rationale and scope (p.53)	Integrated Assessment Tool (IAT) will be used for household economic analyses.
FEWG			

	Impact at scale is less certain. Scaling beyond focal geographies is an inherent challenge, approached in this proposal through use of modelling and intervention technologies (ICT). The tighter geographic focus relative to the CRP as a whole could help maximize impact and synergies. The proposal would benefit from increased emphasis on improved productivity, in addition to greater resilience, reduced land degradation, and market/product qualities already framed as key goals. The gender component would benefit from additional detail.	FP3: Integrated farm and household management (p.53) FP3.9 Gender (p.62)	The FP3 strategy for scaling out is through partnerships. FP3 offers formal research inquiry and analytical tools that provide i) insight into where scale-out investment is warranted; ii) diagnostic analyses that explain system performance with/without innovations; and iii) system-level learnings across multiple case studies. The geographic focus is narrower than the 2016 proposal – only SSA and SA.
	Proposal would benefit from finer diagnostics related to current performance of crop and livestock management systems in the agrifood systems considered and additional clarity in hypotheses to be tested	FP3.4 Science quality (p.57) FP3.5 Lessons learned unintended consequences (p.58) FP3.6 Clusters of Activities (p.59)	Current system performance is reviewed and a set of hypotheses are articulated for each CoA.
	Additional detail would be helpful on partner roles, particularly how the environmental/natural resource research capacity of NARES will be upgraded so they may fulfill their role as scaling partners – and how well this aligns with their core missions. The vision for NARS strengthening needs to be expanded beyond graduate training, to design and implement a clear and credible plan for strengthening the ability of NARES to deliver production recommendations adapted to changing environments, markets, and technological options.	FP3.10 Capacity development (p.63) Annex 3.3 Capacity Development Strategy (p.90)	In congruence with donor expressed priorities, the main focus will be on National Innovation Systems, specifically NARES, national and regional development agents and private sector entrepreneurs who wish to invest in GLDC agri-food systems. GLDC commits to contributing to developing these actors' capacity.
	Reviewers found the broader CRP MEL plan to be in good shape, but sought additional detail particularly for this FP. M&E seems cost-effective, and could be improved with more specific plans, impact pathways, and metrics for outcomes and timeframes.	Annex 3.6 Results-Based Management (RBM) and Monitoring, Evaluation, Impact Assessment and Learning (MEIAL) (p. 95)	Given far reduced page limits in the 2017 submission (100 pages), further detail on RBM and MEIAL will be planned once the CRP moves to implementation.
ISPC “must-haves”			
ISPC-1 DS	Clearly characterize the target dryland systems. The proposal must define dryland areas of the developing world (including target populations) and identify geospatial distribution using a water balance approach that quantifies	1.1 Rationale and scope (p.1) Report on “Characterization of GLDC Mega-environments” and IITA-led report on “Ex-ante Evaluation of Research and	The semi-arid and sub-humid dryland agroecologies are where GLDC research will be planned and implemented.

	risk and severity of water shortage as the basis for categorizing regions that fall into the “reduced vulnerability” focus of SRT2, or the “sustainable intensification” focus of SRT3.	Technology Options” http://crp-glhc.icrisat.org/	
ISPC-3 DS	Provide the criteria for choice of benchmark sites and development of relevant data to inform research requirements in both the biophysical and social sciences, and their synthesis.	1.1 Rationale and scope (p.1) Prioritization (p.6) Supporting documents accessed at http://crp-glhc.icrisat.org/	GLDC does not have benchmark sites as per CRP-DS, but will leverage off large W3/bilateral grants within the target ecologies and aligned with partner priorities.

FP4			
Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
31	FP4 should set out a list of prioritized crop-specific traits for selection in different production environments. Product focus is needed for each crop, and this includes forage as well as grain for dual purpose species	CoA 4.2: Breeding Pipelines (p.71) Section “ <i>Ex-ante</i> evaluation of research and technology options” (p.8) IITA-led report on “ <i>Ex-ante</i> Evaluation of Research and Technology Options” http://crp-glhc.icrisat.org/ Product Concept Notes of GLDC Crops accessed at http://crp-glhc.icrisat.org/	FP4 nominates breeding pipelines guided by Product Concept Notes (PCNs) for each GLDC crop. PCNs include prioritized GLDC crop attributes identified through pre-proposal foresight and ROI analyses. Feed and forage traits are included as traits defined in the PCNs.
32	FP4 should clarify how it will balance the development of broadly adapted varieties vs. breeding for more narrowly defined agroecological conditions	FP4: Variety and hybrid development (p.65) FP4.6 Clusters of Activities (CoA) (p.70)	Table FP4.2 provides the list of focal traits for improvement of GLDC crops including no regret traits.
33	The challenges to phenotyping in dryland environments should be given greater attention, including specifying trait targets and site numbers to be developed to required standards	CoA 4.1: Environmental characterization and phenotyping (p.70)	FP4 will create communities of practice on phenotyping that are supported by phenotyping hubs of Module 4 of the EiB7 platform.
34	FP4 should set out stronger links with the private sector in seed production, specifically for sorghum and millet hybrids, and with community seed systems for non-hybrids	CoA 4.4: Science of Scaling Seed Technologies (p.73)	Seed systems interventions will work closely with private sector and community seed production. GLDC’s strategic partners in SSA are AGRA and Syngenta Foundation to catalyze access

			to improved seed of GLDC crops in Africa.
35	Greater consideration should be given to the value of stover quantity and quality in agro-pastoral systems, and set breeding objectives accordingly	CoA 4.2: Breeding Pipelines (p.71)	Feed and forage traits are included as traits defined in PCNs.
36	Future work should explore the potential for biofortification across all target crops, but designed to reduce or eliminate yield drag, and to ensure identifiability from farm to consumer	FP5.7 Partnerships (p.86)	The HarvestPlus program is an explicit partner and will deliver biofortified pearl millet and sorghum with enhanced levels of iron and zinc in India and SSA.
49	The composition of the FP4 management team needs to be revisited to ensure adequate cereals expertise	FP4.12 FP Management (p.75)	FP5 includes cereals expertise.
FEWG			
	The planned close engagement between FP4 and FP1-3 should provide an effective MEL mechanism for breeding activities, but additional detail on specific plans for this flagship and for how FP1-3 research feeds in would greatly strengthen the proposal	Section 1.5: Program structure and Flagship projects (p.18), including Figure 6: Connections between GLDC FPs. FP4.3 Impact Pathway and Theory of Change (p.66)	Interactions between FPs are articulated throughout the proposal and FP4 narrative.
	The proposal would benefit from greater consideration of seed systems, and adopting the key effectiveness metric of the average age of varieties in farmers' fields.	CoA 4.4: Science of Scaling Seed Technologies (p.73)	Seed systems interventions are articulated with support from AGRA and Syngenta Foundation.

FP5			
Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
37	Future proposals should clarify policy regarding the development of transgenics, as well as for gene editing approaches	CoA 5.2 Trait discovery (p.83)	Use of transgenic technologies in GLDC target crops is guided by the ISPC's strategy on biotechnology (ISPC 2014).
FEWG			
	Flagship outputs should be closely tied to serving FP4 and NARS breeding programs, and guard against becoming overly academic.	FP5: Pre-breeding and trait discovery (p.77) FP5.3 Impact pathway and Theory of Change (p.78) FP5.6 Cluster of Activities (CoA) (p.82)	FP5 impact pathway is through delivery of outputs to FP4.

	A stronger vision for supporting the modernization of NARS capacity (beyond training) would strengthen the proposal, and would contribute to the key output of enabling NARS proficiency in modern breeding.	Past research and lessons learned (p.4) FP5.7 Partnerships (p.86) FP5.10 Capacity development (p.87)	Commitment to achieving continual modernization of crop improvement programs, both within the CGIAR and NARES programs, is at the forefront of GLDC. The emphasis is on empowering of national breeding programs and development of high-functioning, integrated testing networks alongside the NARES and other partners.
	The flagship may need to increase consideration of technical risks and legislative and social license considerations	FP5.5 Lessons learned and unintended consequences (p.81) FP5.11 Intellectual asset and open access management (p.88)	Freedom to operate (FTO) issues will be considered to ensuring that institutions can access and use technologies under appropriate conditions.
	The budget may not be adequate to support the vision of the large number of platforms and tools that are mentioned, as well as supporting broad-based evaluation of germplasm collections and large-scale pre-breeding, and prioritization may be required.	FP5.13 Budget summary (p.88)	FP5 investments will depend on final budget availability and prioritization.
	Research priorities could more strongly reflect demand features for those crops and traits required by farmers and knowledge accumulated by Phase 1 programs	Prioritization section (p.6) 1°, 2° order and spillover priorities (p.10) FP5.6 Cluster of Activities (CoA) (p.82)	Prioritization of traits is supported by a significant effort in pre-proposal analyses.
ISPC “must-haves”			
ISPC-2 DC	Justify and prioritize better the proposed work plans on a crop-specific basis; pool research efforts in identified areas across two or more of the dryland cereals for greater efficiency.	As above	As above

Governance			
Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
21	The CRP Director must have the requisite management skills and be empowered to enforce cross-FP collaboration, involving timely information sharing, frequent meetings of FP and CoA leadership,	1.10 Program management and governance (p.24) Staffing of management Team and Flagship Projects accessed at http://crp-gluc.icrisat.org/	The CRP Director is a 20% role undertaken by the ICRISAT Deputy Director General-Research (DDG-R), who will be supported by a full-time Program Manager and ICRISAT administrative and communication

	joint decision making, and full cooperation during implementation. This also implies a high level of collaboration with the Directors of the various crop programs in ICRISAT, CIAT, ICARDA and IITA		resources. This cost-effective arrangement is fully endorsed by partners and has precedence in the governance arrangements for Phase II CRPs WHEAT and MAIZE.
22	The Director must closely monitor the level of cooperation, put in place adequate incentives and create a CRP culture that values working toward shared goals.	1.10 Program management and governance (p.24)	Taken as guidance for implementation.
25	The next proposal should consider the formation of zonal teams responsible for ensuring that the activities and results of different FPs and CoAs are adequately integrated to achieve concrete impacts at the ground level	1.10 Program management and governance (p.24)	The recommendation for zonal teams was not implemented within the proposal as such needs to be done once final budget and proposal is confirmed and implementation plans are in place. Further, the working unit for GLDC is the CoA team.
45	The panel strongly recommends revisiting the FTE management requirements and allocating adequate leadership time to ensure efficient and effective operations.	1.10 Program management and governance (p.24)	The FP and CoA leaders will spend at least 40% of their time working on GLDC, funded from W1, W2, W3 and bilateral projects – W1/W2 budget allocates 40% to FP and 20% to CoA leadership roles.
46	Greater clarity is needed on the roles and authority of the ISC, and of the ISC sub-committee of independent members.	1.10 Program management and governance (p.24)	TORs for ISC will be confirmed prior to CRP commencement.
47	The ISC's ToR should provide regional and national organization members with sufficient agency to ensure that GLDC's programs are in close alignment with, and fully complementary to, regional and national strategies and priorities.	1.10 Program management and governance (p.24)	ISC membership and TORs will be confirmed prior to CRP commencement.
48	The CRP Director must be vested with sufficient authority, and accountability, to direct the CRP effectively, including ensuring that linkages between FPs operate efficiently.	1.10 Program management and governance (p.24)	Taken as guidance for implementation.
FEWG			
	Success will be contingent on highly effective leadership of the CRP as a whole, so only having an interim Director is a cause for concern.	1.10 Program management and governance (p.24)	No interim Director. The CRP Director is a 20% role undertaken by the ICRISAT Deputy Director General-Research (DDG-R), who will be supported by a full-time Program Manager and ICRISAT administrative and communication resources.

	The proposal would benefit from greater consideration of risks, including implementation and financial risks	1.14 Risk management (p.25) 1.3 Impact Pathway and Theory of Change (p.13) including Table 6: Assumptions underpinning the impact pathway	The GLDC Theory of Change articulated a set of anticipated risks and proposed mitigation strategies.
	The current framework for linkages among FPs is static; the proposal would be improved by clarifying the appropriate sequencing for the recipient FP/CoA to incorporate the new research knowledge from other FPs	Section 1.5: Program structure and Flagship projects (p.18).	Interactions between FPs are articulated throughout the proposal with linkages presented in Figure 6: Connections between GLDC FPs
ISPC commentary on 2016 GLDC submission			
	The issue of lack of collaboration among partner centres and individual scientists as highlighted by the CCEEs is, however, not yet addressed. With the radical change in CRP thinking, direction and design, the difficulty in improving internal collaboration may increase.	1.7 Partnerships and comparative advantage (p.27)	Centers and partners have committed to supporting the GLDC proposal.
	There is a lack of clarity about the status and role of the CRP Director. A new vision may require a different skillset but it is not clear if this is the intention	1.10 Program management and governance (p.24) Staffing of management Team and Flagship Projects accessed at http://crp-glDC.icrisat.org/	The CRP Director is a 20% role undertaken by the ICRISAT DDG-R representing a cost-effective arrangement and appropriate skillset, given the high percentage (~65%) of GLDC to be undertaken by ICRISAT.

Partnerships

Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
12	An updated landscaping and assessment of the capacities of alternative service providers, globally and within the region, for the main lines of research. Some evidence of the cost effectiveness of the centers and major partners	1.7 Partnerships and comparative advantage (p.21) Report on “Priority Setting, Product Lines and Prospective Technologies: Implications from Phase I for a Consolidated Grain Legumes and Dryland Cereals CRP for Phase II” at http://crp-glDC.icrisat.org/	GLDC is a R4D program involving CGIAR and its partners. In developing the proposal, key partners were asked to contribute, resulting in Table 7 listing the partners who were contacted and agreed to support GLDC. The commissioned report by Tom Walker addressed the issue of Alternative Suppliers (p.15 of report) and endorsed the Phase II CRP as taking the lead in this domain.

17	Priorities must be fully informed by, and closely aligned with, the strategic priorities set by regional and national bodies	1.1f: Alignment with regional, country, industry and CGIAR priorities (p.10). Supporting paper “Cross-coordination with Sub-Regional Organizations to Maximize Scale and Impact” accessed at http://crp-glDC.icrisat.org/	Alignment with current strategies of Apex and SRO's in SSA and SA is a key component of the prioritization process for GLDC.
20	Greater consideration needs to be given to the strengths of national and regional programs, as well as the theme-specific comparative advantages, and cost effectiveness, of the CGIAR centers, when defining CRP activities and roles within the research themes	As for 12 above	As for 12 above
27	Clarify how national and regional strategic priorities will be incorporated into the priority setting activities of FP1	Prioritization (p.6), including 1.1f) Alignment with regional, country, industry and CGIAR priorities (p.10)	National and regional strategic priorities are one dimension used in the prioritization process.
38	A systematic and updated landscaping of institutions and programs should be conducted to identify best in class partners with clear comparative advantage to execute work in well defined priority areas.	As for 12 above	As for 12 above
39	More detailed information on the roles, responsibilities and deliverables of key partners should be provided to supplement the general descriptions already contained in the current proposal	Section 1.5: Program structure and Flagship projects (p.18), including Figure 6: Connections between GLDC FPs. 1.7 Partnerships and comparative advantage (p.21).	Each FP has articulated specific roles for partners. FP2 is led by CSIRO. GLDC has commitment from a range of Development and Private sector partners.
40	The future proposal should consider expanding partnerships with private sector entities and with development organizations	1.7 Partnerships and comparative advantage (p.21).	Table 7 lists partners who were contacted and agreed to support GLDC, including 11 Private sector companies, associations and consortia.
42	The next proposal should identify and engage with strong units within selected NARS to play lead roles in conducting strategic and applied research	1.7 Partnerships and comparative advantage (p.21).	Actual arrangements with NARES will be negotiated as part of GLDC implementation plans.
43	The future proposal should also engage and develop collaborative agreements with the SROs, empowering them to take a lead role	1.7 Partnerships and comparative advantage (p.21).	Table 7 lists partners who were contacted and agreed to support GLDC, including key apex and SROs in SSA and SA.

	transferring research results from target to spillover countries		
44	Collaborative linkages with sister CRPs should be prioritized based on an assessment of the priority needs. For the highest priority CRPs, strategies, implementation plans and resource commitments for collaboration should be formally developed and agreed, and formal management structures and procedures put in place and adequately funded. With lower priority CRP collaborations, lighter plans to regularly share tools, methods, advice and results should be developed and implemented	1.6 Cross-CRP collaboration and site integration (p.20) Annex 3.7 Linkages with other CRPs and site integration (p.97)	Areas for cross-CRP collaboration are agreed. Formal arrangement will await GLDC approval and thereafter implementation plans.
50	It is recommended that appropriate planning and coordination structures are put in place within each target country that give NARS leaders on-going voice and influence in planning and oversight of all activities within their respective countries	1.7 Partnerships and comparative advantage (p.21). 1.10 Program management and governance (p.24)	ISC and RMC membership will be confirmed prior to CRP commencement. NARES partners are eligible nominees.
ISPC commentary on 2016 GLDC submission			
	If the institutional and policy constraints are indeed the main force holding back agricultural development in the target geographies, then the proposal needed to be stronger in describing how the project team would be strengthened in relation to this new skill-base.	1.7 Partnerships and comparative advantage (p.21). FP2: Transforming Agri-Food Systems (p.39).	FP2 is now led by CSIRO and has commitment from a range of Development and Private sector partners. GLDC will collaborate with CRP-PIM on institutional and policy constraints within GLDC agri-food systems.
	The proposal does not make it clear how GLDC will effectively be partnering with these actors to drive commercialization across the target zone. A range of political processes and financial constraints often limit the scope for institutional and policy reform. Given the shift of the CRP towards policy and institutional issues, a more coherent plan of action is called for, such as moving to a set of country strategy support programmes, along the lines of PIM/IFPRI.	FP2: Transforming Agri-Food Systems (p.39). FP2.3 Impact pathway and Theory of Change (p.44) FP2.6 Clusters of activities (p.47).	GLDC is not about “driving commercialization”. It aims to improve the performance of agri-food systems for GLDC crops through development, testing, and scaling of interventions in action research with partners. Alongside this, FP2 will coordinate with FP1 and CRP-PIM who will lead in addressing key policy constraints impeding the development of targeted GLDC value chains.
	The new design of the CRP may require additional strength in areas like innovation systems, policy design and analysis, and institutional change. All activity cluster leaders work in CGIAR	1.7 Partnerships and comparative advantage (p.21). FP2: Transforming Agri-Food Systems (p.39).	FP2 is now led by CSIRO and has commitment from a range of Development and Private sector partners.

	Centers (Bioversity International, CIAT, ICARDA, ICRAF, ICRISAT, IITA and ILRI) and mostly at ICRISAT, ICARDA and IITA, but there are none from a non-CGIAR partner; which might make it possible to access the broader range of professional expertise required to deliver the new vision		GLDC will collaborate with CRP-PIM on institutional and policy constraints within GLDC agri-food systems.
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Gender & Youth

Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
6	Gender gap analyses for these crops	1.3 Gender (p.16) Annex 3.4: Enhancing gender integration and social inclusion in the drylands (p.91)	Understanding 'gender gaps' in legume and cereals systems is explicit in the proposal and draws on past analyses from Phase I CRPs.
51	The conceptual frame within which gender and youth issues are addressed should be updated to better reflect the most current thinking.	1.3 Gender (p.16) 1.4 Youth (p.18) CoA 1.3: Gender integration and social inclusion in the drylands (p.36) Annex 3.4: Enhancing gender integration and social inclusion in the drylands (p.91) Annex 3.5: Youth Strategy: Youth Sensitive Transformation of the drylands (p.94)	GLDC Gender research draws on current CGIAR CoP on gender including participation in the GENNOVATE: cross-CRP study on social norms and innovations in agriculture and NRM. Attracting youth into agriculture through agribusiness entrepreneurship and digital agriculture will be explored as offering real opportunities for the transformations being sought.
52	The operationalization of gender issues in FPs 2 and 3 and should be much further developed.	FP2.9 Gender (p.50) FP3.9 Gender (p.62)	Gender is explicit in the research agenda of all GLDC FPs.
53	The CRP should identify and partner with leading institutions working on gender and youth to refine its approaches to mainstream work in on-going research programs and to build gender capacity within the lead centers.	As per 51	Partners include the CGIAR CoP on Gender, AWARD and SEWA. Partnerships with Microsoft, MANOBI-AFRICA and agribusiness companies has one dimension of attracting youth into agriculture through agribusiness entrepreneurship and digital agriculture.
54	The Women's Empowerment in Agriculture Index (WEIA) should be considered for use by the CRP in ex ante impact assessment work to guide	1.3 Gender (p.16)	Women's empowerment is explicitly referenced a number of times in the proposal, but not WEIA as a tool. In

	program design, and in ex post assessments to measure outcomes and impacts. Similarly, consideration should be given to more qualitative approaches such as outcome mapping.	CoA 1.3: Gender integration and social inclusion in the drylands (p.36) Annex 3.4: Enhancing gender integration and social inclusion in the drylands (p.91)	implementation planning, this will be reconsidered.
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Capacity Development

Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
55	The CRP's capacity development goals should aim towards achieving a state where national and regional institutions are empowered to play strategic leadership roles in drylands development and ultimately to lead and resource autonomous research programs to the standard provided by GLDC	1.2 Goals, objectives and targets (p.12) Section 1.3 Impact Pathway and Theory of Change (p.13). FP3.10 Capacity development (p.63) Annex 3.3 Capacity Development Strategy (p.90)	GLDC goal and impact pathway has an explicit outcome of <i>"Improved capacity and inclusivity of agri-food system stakeholders to collaboratively develop innovations that respond to the needs of women, men and youth in GLDC-based livelihoods and value chains"</i> .
56	Much greater operational detail should be provided on the activities and deliverables of the capacity building activities, how they are managed and governed, and whether or not they are adequately resourced	FP3.10 Capacity development (p.63) Annex 3.3 Capacity Development Strategy (p.90)	GLDC commits to contributing to developing capacity within targeted agri-food systems. Details on operations need to await CRP approval and implementation plans.

MEIL

Rec No	Recommendation	Addressed where in the GLDC proposal	Response
Expert Panel Report			
57	Ways to further simplify MEIAL need to be explored and tested, as well as ways to improve cost effectiveness and its real-time delivery of key information	Annex 3.6 Results-Based Management (RBM) and Monitoring, Evaluation, Impact Assessment and Learning (MEIAL) (p. 95)	Detail on RBM and MEIAL will be planned once the CRP moves to implementation; cost effectiveness and real-time delivery of key information are key criteria.
58	Early training of all staff on the objectives of MEIAL, how to use it and how they will benefit must be undertaken before launch and maintained during implementation.	As per 57	As per 57
59	Sufficient incentives must be established to ensure timely entering of accurate clean data.	As per 57	As per 57

60	Sufficient staff should be assigned to process and analyze data, and to assist users when necessary.	As per 57	As per 57
61	Leadership at all levels of the CRP must work to create a deep culture change and commitment to honest, real time learning across all levels of staff.	1.10 Program management and governance (p.24) Staffing of management Team and Flagship Projects accessed at http://crp-glhc.icrisat.org/	GLDC management will be reviewed after 12 months operation to ensure the governance structure supports good decisions made in a transparent, fair and efficient manner to position GLDC for success.