ISPC Commentary on the Grain Legumes and Dryland Cereals (GLDC) CRP-II revised proposal (2017-2022) submitted 31 July 2016

Background

The CRP on Grain Legumes and Dryland Cereals (GLDC) (then known as Dryland Cereals and Legumes Agri-Food Systems – DCLAS) Phase II was submitted in March 2016 for review by the ISPC. DCLAS was created by merging elements of three Phase I CRPs – Dryland Cereals, Grain Legumes and Dryland Systems. ISPC had raised major concerns about all three of these CRPs, especially Dryland Systems, during review of the Extension proposals in 2014. Three Centre Commissioned External Evaluations (CCEEs) conducted during 2015-2016 raised similar concerns. During the development of the DCLAS Preproposal in 2015 the ISPC expected that serious efforts would be made to address the concerns highlighted by these reviews. ISPC’s reviews of the DCLA pre-proposal awarded DCLAS a ‘C’ rating i.e. ‘requiring major changes to be included in the full proposal’. The main concerns were related to: i) clarifying the target domain of the CRP distinguishing between the competing narratives of multi-commodity improvement approach and the agro-ecosystem/farming systems approach; ii) establishing a clear set of priorities; iii) developing a sequencing and feedback strategy amongst the flagships; iv) identifying and justifying essential trait discovery and breeding targets; and v) demonstrating commitment to cross-system exchange of knowledge and experience on working with the seed sector. All 4 CRPs rated as ‘C’ resubmitted revised sections of their preproposals to the ISPC in January 2016 and received further feedback.

Although the proponents made efforts to address these concerns in the full Proposal submitted in March 2016, the ISPC concluded in June 2016 that not all of the major problems were adequately addressed and therefore they could not recommend the proposal in its current form. Nevertheless, owing to the strategic relevance of dryland areas and the target dryland cereals and food legume crops as well as the comparative advantage of the CGIAR on dryland cereals and legumes, the ISPC recommended that the DGs of the participating Centres should develop a strategy paper for overcoming the barriers to addressing previous concerns for discussion at SC2. The strategy asked for DCL to be given the opportunity to submit a revised proposal on 31 July 2016. System Council discussed the ISPC’s concerns on 12 July 2016 and its suggestion that DCL be given more time to resubmit, but they decided that DCL should resubmit a revised proposal on 31 July. After, further interaction between the System Management Office, System Management Board (SMB), ICRISAT and an independent DG, the revised GLDC CRP Proposal was finalised. The SMB supported resubmission of the revised Proposal CRP GLDC Phase II for review by the ISPC and System Council (3 August 2016).

The new GLDC Proposal has been reviewed by the ISPC with contributions from two external reviewers, who are knowledgeable on dryland cereals and legume crops, and the farming systems where they are grown and had reviewed the earlier (31 March submission) proposal.
Overall analysis as an integral part of the CRP Portfolio

**Strategic relevance**: The radical change in thinking about how best to improve the capacities of agri-food systems (AFS) for selected legumes and dryland cereals to deliver resilience, inclusion, poverty reduction, nutritional security and economic growth resulted in development of an innovations systems/value chain rationale for GLDC. The revised Proposal acknowledges that “technological advances in the form of new and better performing varieties, agronomy and farming system improvements and the development of novel value-added products could contribute significantly to livelihoods and farming systems”. However, the revised Proposal argues that, even more important constraints are posed by the institutional and policy issues that restrict the development of these agri-food systems.

The new version of the proposal argues for a very different vision from the previous DCL proposal, and focuses on the commercialization of agriculture, the potential for agribusiness, and a broad vision of agricultural transformation. These are key objectives for development in the regions and are now the focus of the GLDC CRP. 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 vision across the entirety of its target zone and on all the crops. These concerns are discussed below in considering the new Theory of Change (ToC) for this research program. 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.

The previous version of the CRP proposal had a certain coherence in its argument that many of the DCL crops were grown in drylands, and a research program focused on dryland systems in the developing world seemed strategically important. By contrast, the current CRP defines its mandate as including a set of commodities that, according to the proponents, share a common set of institutional constraints and policy challenges. By this measure, it is not clear why these crops differ from maize (for example) or from root crops. The kinds of constraints that are identified here are constraints to agricultural intensification and commercialization more generally, and it is not clear why these constraints apply uniquely or specifically to the GLDC crops. The proposal reads: “These important crops all share the same constraints of underdeveloped agri-food systems due to inadequate support and investment by the public and private sectors. They also share their multiple values in agri-food systems as nutritious and resilient food for local consumption and as traded commodities, or as feed and fodder for livestock, and in their particular importance for women farmers and consumers.” The same logic applies to many other CGIAR mandate crops and indeed to animal agriculture, aquaculture, etc. There still seems to be some confusion as to whether this CRP is defined by a set of commodities, a set of solutions, or a focus on dryland ecologies.

The new focus of the CRP seems to be on a set of activities which is a departure from the traditional skill-base: “[T]he key to unlocking this opportunity is the common set of institutional and policy issues that restrict the development of effective agri-food systems as a whole.” 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. While the lead Center arguably has high credibility with agriculture ministries and policy makers, the new focus on value chains and commercialization in the CRP involves a very different set of actors than that of the previous proposal: e.g. private sector agribusinesses, processors, supermarket
chains, etc., especially in Africa. 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.

**Consideration of 'grand challenges':** 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.

**Inter-CRP synergies:** the Proposal does a far better job than the previous version in explaining the potential synergies with other CRPs, including both the AFS CRPs and the iCRPs. 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.

**Rigor and credibility of scientific arguments:** The rethink and redesign of the CRP Proposal has placed the multi-commodity improvement approach into an innovations systems/value chain system. 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.

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 (see below). 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. In many sub-Saharan countries, for example, it is not clear that policy implementation is very effective – even when the policies themselves may be quite well designed.

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.

**CRP offers more value than sum of Flagship Projects (FPs):** There is a genuine effort to organize the GLDC CRP around a set of FPs that have coherence and that can represent a good value prospect. However, the Proposal seems to be still divided into two streams of research: a dominant technology stream (FP4 & FP5 guided by existing/ historical priorities) and a dryland livelihood stream (FP2 & FP3, guided by priorities emerging from the value chain and innovation systems approaches). The ISPC has specific issues and concerns on the quality of individual FPs; but these issues are not addressed here, given that the overall assessment is that the Proposal is as yet incomplete.
Lessons learned: It is clear that there have been many lessons learned, in the sense that the focus of this CRP has shifted dramatically since the previous round. That suggests that the critiques of earlier reviews have been taken seriously (especially with respect to target domain and prioritization). At the same time, there may be potential to learn additional lessons from other CRPs and previous efforts in some centers to pursue programs aimed at policy change and commercialization. The proposed focus of this CRP’s work may be new for GLDC and its precursors, but there is quite a lot of experience to build on from other CRPs. 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.

Site integration: There is strong evidence that the CRP is taking account of site integration plans. “GLDC focuses its work on 14 primary target countries and 15 spill-over countries (see Table 1). Of these 29 countries, 16 are identified as CGIAR site integration countries (Burkina Faso, Ethiopia, Ghana, India, Kenya, Malawi, Mali, Mozambique, Nepal, Nicaragua, Niger, Nigeria, Rwanda, Tanzania, Uganda, Vietnam and Zambia).” The identification of spillover countries is welcome for efficient application of successes in one country to another.

Theory of Change and Impact Pathway

The revised ToC recognizes the complexity of agricultural systems. Dryland systems, grain legumes and dryland cereals remain dominant aspects. 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.

Cross-cutting themes

The narrative on gender continues to address gender issues throughout GLDC. The CRP is committed to mainstreaming gender across its research. The overall tone of the document and the attention in the FPs suggests a generally strong gender commitment. The youth strategy is much improved and includes a range of interventions including development of innovations suited to youth and income generating opportunities as well as capacity development.

GLDC shows a clear commitment to capacity development throughout most if not all research activities. “GLDC adopts a comprehensive definition for capacity development in that it includes all efforts, interventions and interactions that lead to the sustained development of knowledge, expertise, infrastructure, enabling environment and governance that allow individual women and men, organizations and systems to perform at the best of their productive capacities to reach local, national and regional goals and to deliver impact”. This seems to be a very ambitious objective and will require detailed M&E capacity to capture achievements.
**Budget**

With the proposed redesign of the CRP, the total budget for GLDC during 2017-2022 is US$ 522 million, of which US$69 million is from W1/W2 (13%) and 87% from W3 and bilateral sources.

**Leadership & partnership**

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. Flagship leaders are drawn from three of the partner CGIAR Centers (ICARDA, ICRISAT and IITA) and ICRAF. 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 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.

The partnership strategy is based on established partner networks participating of ongoing Dryland Cereals, Dryland Systems and Grain Legumes CRPs, and on a 2015 situational analysis of partnerships in last (whose report is still pending). Partnerships include an array of collaborative steering, governing, managing and implementing modes, while bringing on board principles of joint networking, resource mobilization, in-kind partnerships and joint ventures, among others. Advanced Research Institutes and Universities are included as partners for discovery while NARS are engaged in product development and stakeholders in the private and public sectors are brought for delivery.

**Conclusions and options for the way forward**

The ISPC did not consider it appropriate to give a rating to the GLDC proposal since the proposal comes across as ‘incomplete’, unsurprising given the short time available for the
rewriting. However, the Council did consider that the new focus on value chains and commercialisation illustrated show potential for the thinking being developed into a CRP which would be successful (in terms of contributing significantly to delivery of the SLOs) in the medium-term. The thinking within the proposal suggests the emergence of a possible long-term strategic vision that could have a positive impact on the target beneficiaries of GLDC. The ISPC were not convinced, however, that the current program arrangement and structure could lead to a successful CRP.

The ISPC consider it essential that the CGIAR portfolio should include a CRP focused on GLDC’s target beneficiaries, given the CGIAR’s comparative advantage in the crop improvement and management of grain legumes and dryland cereals and the emergence of a potential new vision. We therefore recommend a radical rethink of this CRP, but that in the interim, funding be prioritized to ensure that the key expertise in breeding and agronomy of the target crops can be retained within the CGIAR.

We have articulated the following three options for the SMB/SC to consider:

Option 1. Convening (by a body independent of the CGIAR System Organization) of a series of workshops to articulate a vision for the target region (target to be defined by the SMB) followed by commissioning by the SMB of preparation of pre-proposal for a CRP to deliver on that vision.

Option 2. An open call is issued (presumably by the SMB) for a more visionary and coherent CRP that capitalises on existing CGIAR expertise in grain legumes, dryland cereals, and dryland systems.

Option 3. The SMB reconsider the decision to base the original DCL on all 3 Phase 1 CRPs: Grain Legumes, Dryland Cereals and Dryland Systems.