

22nd February 2012

ISPC Commentary on the resubmission of the proposal CRP3.6: Dryland cereals (*Revision of February 2012*)

The ISPC has reviewed the revised proposal CRP3.6 on Dryland cereals. Below is a summary of the ISPC's assessment and its recommendation, followed by a detailed commentary on the proponents' response to the list of "*Must haves*" from the Fund Council.

Summary

In the ISPC's initial commentary on this CRP there were two main concerns. First, the ISPC questioned the justification for an expanded research agenda on the four dryland cereals (barley, finger millet, pearl millet and sorghum). The ISPC did not find sufficient justification based on realistic estimates of the poor and vulnerable people in clearly defined target regions likely to benefit from this research and credible expectations of demand growth of these cereals. Secondly, the ISPC expected to see better justification of how research on these diverse cereal crops in a single CRP would be integrated and prioritized, and what kinds of synergies could be expected from such integration.

The proponents have offered only a minimalist response in the revision. The revised proposal has very few changes that address the "*Must haves*" directly, and there are no detectable changes to the original research plans. In contrast, the governance and management has been substantially changed following the recommendations. The proposal now indicates that the authority granted to the CRP Director and resources allocated for CRP management are more compatible with the demands of a Program of considerable size and complexity. This is a promising sign.

The resubmitted proposal includes more narrative information in the expanded Appendix 2 and several new or revised tables that provide additional information on the production of the dryland cereals, demographics in the countries where they are produced, crop-specific work plans, and list of initial partners. However, much of this additional information is not clearly connected to what the proposal intends to do and doesn't seem to have influenced research prioritization. The core proposal still seems to present an extension of on-going work within the existing institutional Center set-up. Impact pathways have not been substantially modified and they do not reflect any of the new constraints discussion in Appendix 2. Although consolidations and new prioritization is foreseen in the future, evidence-based priority setting does not seem to have guided the current plan. Therefore it is not clear what the criteria for prioritization would be in the future. In fact, the resubmission shows an 8.5% increase in the total budget, which all seems to go to ICARDA for barley, and is classified under "funding gap".

The proponents have prioritized 17 countries where emphasis will eventually be placed after current work in some additional countries is completed. However, the data presented do not fully support the country prioritization. As the poverty figures that have been used relate to national rural poverty levels, countries like Turkey come up as very poor (rural poverty is 39%). Absolute numbers on rural poverty would have made the prioritization clearer and these are provided in the World Development Report 2008. In any

event, it would be instructive to compute the poverty numbers for both \$1 and \$2/day levels and IFPRI has developed sub-national poverty maps for each poverty level as part of the SRF process.

One of the primary shortcomings in the original proposal was lack of clarity on how the poor would benefit from the research, either as producers or consumers, given that the big driver of demand for dryland cereals is now non-food uses. While this is acknowledged in the proposal, it is not addressed in the analysis or the research plans. For most of the non-food uses, especially livestock feed and brewing, the benefits on the consumer side accrue to higher income consumers. On the producer side, the more commercially oriented producers will likely benefit most, and the proposal lacks useful analysis and evidence of how the poor producers could participate in these markets. For this reason, the ISPC recommends that a prioritization of research for this CRP should be conducted making an analysis of this bifurcation in demand for the different crops; between non-food uses on the one hand and the contribution of these crops to the food security and livelihoods of poor in marginal areas on the other. Such an analysis would also be expected to lead to the elucidation of different technical and delivery requirements to ensure impact from research on the crops chosen. Presently, it is not clear on which basis the countries have been selected unless they simply represent significant amount of past and current activities of the Centers involved; for instance in CWANA with barley.

The demand and supply projections (Tables 3-1 and 3-2 respectively) also raise issues as the supply projections relative to demand vary tremendously from crop to crop and region to region and the figures in the tables and text do not match (for instance regarding increase in supply for millet in ESA where Table 3-2 suggests a massively high increase in supply relative to demand). It is difficult to interpret how these aggregate regional demand estimates have influenced the prioritization and how they relate to the plans in revised Table 3-5 which targets 20% of the potential benefit area in nearly all the 17 countries.

The elaboration on barriers to adoption in the expanded Appendix 2 points to many structural issues that this CRP research, and CGIAR research in general, may not be able to address: poor infrastructure such as roads, land tenure, weak extension, credit and market access and many issues regarding policies that, for instance, favor certain crops against others. Some of the constraints are general characteristics of dry areas - such as risk-aversion, decision-making dynamics, market development etc. While these constraints are highly relevant for CRP3.6, they require a systems approach which is expected to be a priority for CRP1.1. Dealing with these constraints must therefore be coordinated through joint research with CRP1.1, and linkages between these two CRPs are frequently mentioned in the CRP3.6 proposal. The mechanisms for joint work and the future relationship between these CRPs, or CRP 3.6 and other CRPs, deserve to be kept under review as the Consortium considers the best means of ensuring the outcome orientation of the system's portfolio and prioritization of the work for this ecoregion. For instance, very little policy research is proposed in CRP 3.6.

It is clear that the proponents have not been able to complete a prioritization among the various crops and regions in a meaningful way in the short time that was taken to prepare the re-submission. To some extent the difficulty in prioritization stems from the lack of a System-wide framework that should be embodied in the SRF. Given the lack of clarity of the program objectives for crops, traits and regions and lack of prioritization within the long list of constraints, the CRP will have difficulties in meeting its objectives.

Recommendation

Because the revised CRP 3.6 proposal has not adequately addressed the list of “*Must haves*”, **the ISPC recommends that the proposal is still not ready for approval until substantial revisions, taking into account the original ISPC commentary in detail and addressing the ISPC and FC list of “Must haves”, have been completed satisfactorily. In prioritizing research on dryland cereals, the following issues should be taken into account:**

- comparable poverty data at the country level across semi-arid and arid regions
- predictions of where the demand is coming from (food vs. non-food uses) and subsequently focusing on research that will benefit the poor as primary target beneficiaries
- prioritization of the adoption constraints to allow focus on those barriers that can realistically be addressed through the proposed research in this CRP
- a funding scenario without the funding gap or with considerably smaller funding gap

The ISPC considers that for the CRP to address fully all the “*Must haves*”, particularly regarding rigorous and transparent prioritization, considerably more time than taken to produce the most recent revision will be needed.

ISPC Must Have 1. Provide an improved analysis and presentation of the target populations who can realistically be expected to benefit from the CRP 3.6 research.

Not sufficiently addressed. Appendix 2 has been considerably expanded with a large number of tables (Tables 2-1—2-17) showing crop and region specific data on production and trends, and Appendix 3 considers targeted areas, households and beneficiaries, although without much disaggregation of the latter. Revisions in Table 4 and the new Table 5 are useful additions and go some distance in providing the kind of data that is critical for targeting CRP3.6 research in terms of crop species, country, and region. Data on area devoted to dryland cereals and on poverty indicators are essential for prioritization. However, the choices of the 17 priority countries are not easy to assess based only on these statistics. It is not exactly clear how data in Tables 4 and 5 were used to select the countries targeted for emphasis in West and Central Africa or East and Southern Africa. The poverty figures in Table 4 are not comparable as they are relative to national poverty levels. This places for instance Turkey among countries with high concentration of poor (rural poverty 39%). Absolute poverty figures would show that in CWANA the number of poor is relatively small and most countries have relatively high standards of living, especially compared to WCA and ESA. Hence, it is unclear why the CWANA countries have been given a high priority. In Table 3-5 there is a much more comprehensive presentation of the total and targeted beneficiaries by country and crop. However, there is no explanation as to how the targeted area in nearly each country has been fixed at 20% and how this related to either relative poverty within country or demand estimates.

ISPC Must Have 2. 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

Partially addressed. Table 6 has been added and it presents crop-specific plans and areas of research integration across crops. Some of these cross-cutting areas, however, do not necessarily mean integrated research, but that each crop species will require similar information, for instance on yield gap data, status of global collections etc. Instead, the opportunities to improve efficiency should be explicit with regard to work to be performed and how it will be conducted so that synergies are more visible. While Table 6 summarizes this information at a high level, there is no indication of prioritization and which activities were excluded. There is reference to future prioritization but no elaboration of a process that would help do support it (also see ISPC comments in relation to Must Have 1).

ISPC Must Have 3. Reduce the scope of research in terms of crops and target areas when likely effectiveness of the research at scale cannot be demonstrated

Not addressed. The proponents argue that the scope cannot be reduced. However scope can always be reduced commensurate with funding. The ISPC is not currently convinced by the justifications offered for priorities in this CRP. It is stated that the disaggregation of efforts by country shows the alignment with similar country-based efforts by other major research and donor organizations. However, apart from the

added Table 11, which lists initial partners by target country, there is no elaboration of what the alignments will be and whether there are any changes in the partnerships from past activities.

ISPC Must Have 4. 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.

Not sufficiently addressed. The revised Appendix 2 includes a discussion, organized by each of target regions, on barriers to adoption and innovative approaches to overcome them. However, these descriptions are presented in the abstract and do not derive from analysis of current work. It is acknowledged there are lots of new varieties and new technologies but that adoption has been very low. Also the barriers described are in many cases very generic such that CRP3.6 research, or any research for that matter, can do little about: infrastructure, roads, national investment on R4D, unavailability of inputs or inability to use inputs, land tenure, weak extension, credit and market access, etc.

ISPC Must Have 5. Present new and innovative approaches to overcome constraints to adoption of the range of technologies by the poor and vulnerable, particularly in Africa, and to increase the likelihood of impacts in their livelihoods

Not sufficiently addressed. It remains unclear what the proposed research is likely to contribute. For instance, how can CRP3.6 be effective in supporting institutions and influencing policies? The proposal does not show how specific constraints would be addressed through research. Policy research content is very limited. In Appendix 2, the lists of new, innovative approaches include activities that are generic for many of the CRPs, such as advanced biotechnology, participatory breeding, policy solutions and new kinds of partnerships. Many of the approaches are not new and many of them are not elaborated to show how the CRP will address the multiple constraints in a more effective way than has been done previously, or how research will contribute to the alleviation of some of the major constraints.

ISPC Must Have 6. Present realistic and research-specific impact pathways that carefully address the conditioning factors and incorporate feedback loops.

Not sufficiently addressed. There are minor changes to the CRP-level impact pathway diagram, differentiating between research outcomes and development outcomes. The feed-back loops, now added to the CRP-level and SO-level impact pathway diagrams, are just that: an arrow marking feed-back on demands and constraints. None of the impact pathway diagrams address constraining factors and the document text has not been revised. For instance in SO4, for developing sustainable crop, pest, and disease management options, there is a direct jump from *Gender responsive management options to reduce yield gaps* to *Users adopt yield gap reducing strategies* to *Climate change shock mitigation through new crop management practices*. Some of the most challenging barriers to adoption occur along this pathway, which would require (based on barrier lists in Appendix 2) major changes in infrastructure, extension, incentive systems, investment, capacity and policy at local level. In fairness, the proponents state that development of detailed pathways would require an extensive effort. But if that's true (and we agree that it is), then what confidence can donors have in achieving impact through investment in CRP3.6 research until pathways have been better defined?

ISPC Must Have 7. Show better integration of CRP3.6 with CRP1.1 (Dryland Systems), as well as justification for their separate identities or merger; there needs to be a plan to monitor the impact pathways for CRP 3.6 cereals research drawing lessons from both CRPs

Partially addressed. Only a few words have been added about CRP3.6 and CRP1.1 linkages, namely, that CRP3.6 will participate in CRP1.1 annual meetings. The section on linkages and collaboration (Table 12) has not been changed. As in the previous proposal, there are frequent references to work that will be undertaken jointly with CRP 1.1, including reference to specific activities which should aid integration between the two CRPs. but this does not follow through into the request for a plan to “monitor the impact

pathways..... drawing lessons from both CRPs”. This omission somewhat undermines the words of comfort regarding integration with CRP 1.1. There is nothing new in the resubmission that would show common understanding of impact pathways between CRP3.6 and CRP1.1. A case is made in the response for maintaining the 2 CRPs as separate entities, highlighting the systems approach in CRP1.1 (which gives it a broader scope), on one hand, and the shared demand drivers and the common researchable issues for the CRP3.6 crops (p13), on the other hand. The ISPC considers that the future relationship between these CRPs, or CRP 3.6 and other CRPs, deserve to be kept under review as the Consortium considers the best means of ensuring outcome orientation and prioritization of work for the drylands.

ISPC Must Have 8. Streamline the governance and management structure providing for independence in decision making, monitoring and evaluation: (i) structure and resource the Advisory Panel with formal oversight by the Lead Center Board; (ii) address redundancies in the Steering Committee and the Program Management Team; (iii) strengthen the role and authority of the CRP Director; and (iv) clarify and adequately resource the CRP management functions (including communications, resource mobilization, and program evaluation).

Satisfactorily addressed. The revised structure is much improved: the CRP Director’s role and authority have been strengthened, and the reporting lines and role of the Independent Advisory Committee appear appropriate. Removal of the Steering Committee is welcome and the clarified roles of the research management team appear to be sound. Explicit reference to the Lead Center DG working with fellow DGs in the recruitment and management of the CRP Director also gives the sense of a CRP responding to the need for closer working between CGIAR Centers. The budgetary changes to adequately resource the Program Management Unit are welcome although proponents did not address the request for increased clarity of the pertinent management functions (note--there is still mention of the Steering Committee on p120!).

FC Must Have 1. Strengthen the case for this CRP at two levels - explaining why CGIAR and its partners must invest in dry land cereals and why they should invest through a specific CRP dedicated to these dry land cereals as opposed to integrating these activities in other CRPs

Not sufficiently addressed. The proponents have explained these issues in their response to ISPC “Must haves” 1-4, for which the ISPC’s comments are given above.

FC Must Have 2. Greater consideration should be given to the potential of local innovation to inspire novel research, and impact pathways should be significantly improved

Not sufficiently addressed. The discussion in Appendix 2 on barriers to adoption and some of the suggested approaches represent major challenges that require changes at national and local levels, which global research may not be able to achieve. Participatory breeding and farmer field schools are not new approaches. There is need to consider how, and to what extent, CRP3.6 participates hands-on in these activities and generates broader lessons as IPGs, how feed-back from these local activities gets effectively incorporated into the CRP’s priority setting, and what other approaches, including novel use of new communications technology, the CRP can use to gather and use local information across its global operations.

As discussed above for ISPC *Must have* 6, impact pathways have not been notably changed.

FC Must Have 3. Provide further attention to Monitoring and Evaluation system

Not addressed. The need for further attention to M&E remains. There is confusion about terms – mention of an R4D Advisory Committee in the response, an Independent Advisory Committee in the diagram and section on management and Independent Scientific Advisory Pool in the section on M&E! It would help to have clarity on what exactly is meant by ‘R4D experts’ to serve on the Independent

Advisory Committee (p 118). Are these envisaged as researchers or researchers and stakeholders? It would also be helpful to ensure that the role expected of that group in the M&E section is reflected in the earlier section. Table 13, which remains from the previous submission, commendably includes also qualitative measures for monitoring some of the key outputs. Consideration of scientific quality should be given more attention.

FC Must Have 4. Elaborate on the synergies and working interactions with other CRPs, in particular CRP 1.1, but also CRP 4 and CRP 7

Partially addressed. The interactions with CRP 1.1 were referred to in the commentary on ISPC Must-have 7. As mentioned, the changes in the proposal regarding CRP linkages to other CRPs appear to be small. The links with CRP 4 seem to be appropriate. The links with CRP 7 were less convincing.

FC Must Have 5. Elaborate on communicating results in different ways and specifically to women stakeholders

Satisfactorily addressed. The response from the proponents is elaborate giving a clear. Communication will be a major responsibility of the CRP Director, and will be harnessed not only to disseminating results but also to accelerate research paying due attention to novel communication methods and approaches.

FC Must Have 6. Further clarification and justification for the priorities and proposed budget allocations among SOs and the DCs are required

Not sufficiently addressed. These requirements have been also discussed under ISPC “Must haves” 2 and 3 above. There is no clear indication of priorities in Table 6, although this new Table shows which activities will be included in each SO-specific budget item. It is noteworthy that the ICARDA budget (Table 14) has increased by 35% and all this is under “Funding Gap”. This increase is all for barley research in all other regions except WCA. Among the SOs there are budget increases in particular for SO2, and also SO3 and SO4. The narratives do not provide explanations for these increases. There is no further information on budget allocations to developing countries but the revised budget shows about a percentage point decrease in funds to partners, which now is 12.1% of total.

FC Must Have 7. Focus more on the specific conditions of the targeted population (where and who live - the people for which an appropriate research program on dryland cereals can really make a difference)

Not sufficiently addressed. The proponents intended to address this “Must have” in their responses to ISPC “Must haves” 1-4. As commented, the barriers to adoption are listed and discussed in Appendix 2, but the research agenda, proposed approaches and impact pathways are not well linked to those specific constraints.

FC Must Have 8. Present evidence of linkages with the Regional Fora and other constituencies and/or community of practitioners in the development of the proposal. There is no indication of relative allocation of resources between the CGIAR centers involved and partners

Partially addressed. The proponents have explained the proposal development process in their response. Budget allocation tables have been slightly revised as stated above in the comment on FC “Must have” 6.

FC Must Have 9. Provide information on formal commitment of other partners in the budget, beyond statements of expected contributions in kind and/or activities to be conducted

Partially addressed. Table 11 is a useful addition providing a list of initial partners by target region and country. From the budget tables it can be seen that 12.1% of the 3 year total budget is allocated to partners (this is slightly less than in the original proposal version). What is less clear is how soon partners other

than those currently engaged with the Centers (p129) could be brought on board. It would be surprising if all the partnerships appropriate to the new agenda were already in place.

FC Must Have 10. Explore linkage to CCAFS and to view the proposed research through a ‘climate smart agriculture’ lens

Satisfactorily addressed. See response to FC “*Must have*” 4. While the proponents have not modified the CRP3.6 workplan to specifically identify opportunities for collaboration with CCAFS (CRP7), the response to the “*Must haves*” clearly indicates how research outputs from CRP3.6 can contribute to CCAFS. Follow through is required to monitor this situation to ensure that CRP3.6 outputs are useful to and used by CCAFS.