

## **ISPC Commentary on CRP 1.2 “Humidtropics: Integrated systems for the humid tropics” (15<sup>th</sup> August 2012 version)**

### **Introduction**

The re-submitted, revised proposal CRP 1.2 “Humidtropics: Integrated Systems for the Humid Tropics” seeks to transform the lives of rural poor in humid lowlands, moist savannas and tropical highlands of three major Impact Zones in sub-Saharan Africa, tropical America and Asia, containing a population of 2.9 billion, including many poor smallholder farmers. Humidtropics research is guided by a global hypothesis “*A stepwise series of preferred livelihood strategies exist within the humid tropics where poverty reduction, balanced household nutrition, system productivity and natural resource integrity are most effectively achieved and contribute best to human welfare*”, which addresses the development challenges of reducing poverty and improving ecosystem integrity in the humid and sub-humid tropics. The strategic direction, goal and objectives of the CRP are aligned with SLOs.

The overall framework for CRP 1.2 is built around three complementary Strategic Research Themes (SRTs): Systems Analysis and Synthesis; Integrated Systems Improvement; and Scaling and Institutional Innovations. Together these SRTs will conduct a baseline Systems Analysis and Synthesis leading to identified entry points for integrated production systems research; design and implement an M&E Framework; assemble, test and refine systems interventions through participatory processes; champion new farm opportunities through Research for Development (R4D) Platforms as pathways to assess fuller impacts and adoptability of the most promising opportunities; link these platforms to partner development institutions; and then advance the effectiveness of these institutions to scale up these interventions, with a particular focus on poor households and gender equity. There is a strong focus on achieving development outcomes through the generation of methodologies and processes. It is an innovative and very ambitious program that has potential to significantly improve the lives of many thousands of rural poor.

This version of CRP 1.2 follows an initial submission (October 2011) which was comprehensively rewritten to accommodate an in-depth review by the ISPC. As well as raising many issues in its first review, both the ISPC and the Fund Council (FC) identified a list of “must haves” which were expected to be addressed by the subsequent version (January 2012) but were not fully achieved. The overall assessment of the ISPC at that stage was that the CRP was still too ambitious, too broad in coverage, dominated by innovations systems and complexity theories, and lacking in the requested details highlighted in the earlier ISPC commentary. In particular, the revised proposal had insufficiently addressed most of the “must-haves” from the ISPC and the FC. It was therefore recommended that SRT1 activities be approved for 18 months only, with resubmission to the ISPC after 12 months; currently-funded research (e.g. through bilateral projects) should be continued, if relevant to the hypotheses presented and the research questions proposed.

This latest version (August 2012) of CRP 1.2 has not only been re-written to address the many issues raised by the ISPC and the FC but is also complemented by an Expanded Summary (Appendix 1), detailed work plans for the four priority Tier 1 Action Areas (Appendices 2-5), a detailed Implementation Plan (Appendix

6), a List of Milestones (Appendix 7) and a Timeframe diagram (Appendix 8). These additions have added needed detail, structure and clarity to the proposal. However, despite the major changes in geographical coverage and prioritization across years 1 - 3 of the proposed program, from version 1 to version 2 to version 3 (changes which should have resulted in changes in staff time, travel and operating expenses) the yearly budgets and the total budget requests remain the same. The narrative has changed but have the planned activities on the ground changed?

The bottom line is that efforts have been made to address the must-haves highlighted in the previous ISPC commentary, as outlined in the sections that follow. The good faith effort to address these issues has, however, resulted in a wordy and cumbersome document. Likewise, the proposal is still well below expectations regarding a clearly articulated strategy for applied research, and how this strategy addresses critical constraints to agricultural and human development in the humid tropics. It remains mostly a description of processes rather than specific priorities against which the ISPC finds it difficult to judge science quality or explicit links to the proposed research outputs and impacts. Thus, the current proposal does not give CRP leadership or the FC any clear markers against which to judge progress. *But the proponents claim that better clarity depends on a period of strategic assessment and the selection of Action Sites where concrete work will be developed is reasonable.*

**Recommendation:** The ISPC accepts the premise that the above deficiencies can be addressed through careful prioritization, monitoring and evaluation as the project is implemented and recommends approval. The ISPC believes that there is a critical need to address substantive remaining issues as described in detail in following sections. The key questions are whether keeping CRP 1.2 “in limbo” while these are issues are addressed will lead to a better program, or whether the newly reformed CGIAR can manage the transition. We think the latter scenario is more likely to deliver progress, and that primary responsibility for ensuring these critical issues are addressed must reside with the Consortium and the Independent Evaluation Arrangement. However, the ISPC would be happy to contribute to this process as requested. If the system CRPs are viewed to be essential components of the new CGIAR portfolio to serve as crucibles of integration of different outputs from more up-stream research, then we note there are fundamental differences between system CRPs and commodity/topical focus CRPs, and that the former have a greater challenge in articulating a specific work plan. Thus we recognize a need for a different model of continual review, monitoring, and evaluation. for the system 1 series CRPs.

The ISPC is concerned that the proponents should address the following in the development of the CRP and its concrete work plans:

*Testing the hypothesis of intensification:* The language of systems-based approaches is correct and the integrative nature of the proposal is commendable. The proposal takes a fundamental position that intensification is the best path and will deliver ecosystem and natural resource benefits as well as providing increased productivity, leading to improvements in income and other SLOs. This may be true for landlocked countries in Africa but for countries selling into a world market the assertion is less clear (e.g. Brazil, Paraguay). The program needs to have an experimental, testing approach to its major hypothesis rather than setting out a position of advocacy.

*Testing the research hypotheses:* Although, as discussed below, attempts have been made to structure research hypotheses, the complexity of the statements makes them difficult to test. For instance, H12 holds that “Multiple social influence, institutional innovations, and marketing strategies that change stakeholder behaviors, including all value chain actors, are required for the scaling of promising socio-technical

innovations. This is not a well-formulated hypothesis for testing. Other hypotheses simply seem like statements of operating principles or values; for instance, H5 holds that “Increasing productivity that retains and builds natural resource integrity at system level through agroecological intensification requires increasing understanding and management knowledge of ecological processes in pest management, soil fertility, plant nutrition, organic and inorganic inputs, and the availability of seed of high-quality cultivars.” To the extent that these hypotheses matter for the CRP’s theory of change, there is no discussion of how the CRP might be affected if these hypotheses turn out to be false. For instance, H10 holds that “The use and conservation of agro-biodiversity effectively foster greater systems productivity, ecosystem resilience, and livelihood opportunities.” What if this is not true? How would it affect the CRP’s priorities? Or perhaps more crucially, H3 holds that, “Policies providing security of tenure and enhanced income opportunities will increase rural household investments in improving their natural and biodiversity resource base.” This is a plausible hypothesis; but surely it is also plausible that the opposite is correct: What if policies providing security of tenure instead encourage farmers to clear their land and plant soybeans in large-scale monocrops? What then would be the implications for the Humidtropics CRP? In summary, the thirteen hypotheses that together form a theory of change are mostly assumptions rather than hypotheses, and the proposal does not discuss how they might be tested or what would be implied for the CRP in the event that these assumptions prove false.

*Selection of Action sites and Action Areas:* although the proposal is critical of the RCT approach the section on Monitoring and Evaluation does not offer a positive description of what the program will do. The ISPC believes that in the initial site selection the program provides the best opportunity to randomize where the program will work and identify “treatment” and “control” sites. More thought should be given to this development and rewriting of Section 13 on Management and Evaluation. In addition, the proponents should seek input from the commodity and topical CRPs regarding the choice of Action Sites. It will be necessary to have buy-in from these CRPs to ensure their engagement and their interest in testing their research outputs within the systems research context.

*Presenting the science on which criteria and choices will be made:* the proposal rests on decades of research by CGIAR and partner scientists yet very little is forthcoming in the proposal about how this former science and its results will shape future choice. This should be made apparent in the justification for Action Sites in the future and the entry points for research.

*In-situ conservation of genetic resources:* the most recently revised proposal includes a late addition of specific funding for agrobiodiversity research and Bioversity International in particular. The generic deliverables identified on pp128-9, particularly the baseline assessments against which the suitability and priority of future interventions can be judged, are weak. Likewise, this section differs from the main text of the CRP, and concerns over the testing of hypotheses, as discussed above, and are relevant to this area. The ISPC therefore strongly suggests that the appropriate mechanism for mainstreaming research on genetic resources conservation, characterization and use into this and other CRPs be determined by alignment with a system-wide strategy for research on in-situ agrobiodiversity, which is under development by the Consortium.

*Gender:* we welcome the focus on gender as a target for research and equitable development. The strategy proposed however is generic and there is nothing to distinguish the approach (e.g. by saving women’s labour in post harvest processing of cassava or other root and tuber crops) which distinguish this section from any other proposal.

## **Assessment of the extent to which proponents have addressed the ISPC “must-haves”**

**ISPC must-have 1:** *Narrow down the geographical scope of the proposal to regions where a new CGIAR systems approach will have the greatest benefit in terms of poverty alleviation and ecosystem integrity.*

It is likely that some confusion about this must-have was created by a lack of congruence between the ISPC must-have 1 and the FC must-have 4 on what the preferred focus of this CRP should be. This led to an expansion of Action Areas from seven to eleven with even less geographical focus than the original proposal. In response, the ISPC requested a more prudent approach with a focus on the humid tropics with pilots in priority selected Action Areas where good basic partnerships already exist, which can be developed and new partners welcomed. Additional Action Areas could be added over time. Follow-up discussions between proponents and the ISPC (June 2012) and a pre-review of the in-progress revision by the Consortium CEO (July 2012) resulted in priority being given to four Tier 1 Action Areas (West African Humid Lowlands, East and Central African Highlands, Central America and the Caribbean and the Central Mekong) as well as a series of planning workshops to provide greater focus throughout the third version of the proposal. Tier 2 and 3 Action Areas where cross-centre links, partnerships and activities were less-developed are planned to be phased in during the latter part of the first 3 years but most of the major activities will occur in the second phase of the project thus allowing these Action Areas to build on the experiences and lessons learned from the Tier 1 Action Areas. This plan is more prudent, sensible and phased in keeping with the ISPC’s recommendation although the geographical focus remains broad.

**Response to ISPC must-have 1:** The approach suggested in the current version of CRP 1.2 should address both ISPC “must-have” 1 and the FC “must-have” 4. It is a reasonable compromise and should be more cost-effective.

**ISPC must-have 2:** *Prioritize research questions and approaches to be carried out at the most important Action Sites, paying due attention to the selection of sites and identifying jointly with other CRPs the research to be provided by other programs and partners active in humid zones. The prioritization will take account of the scientific and socio-developmental lessons learned from prior research and relate this to hypotheses to alleviate the actual situation of poverty and resource degradation at the target sites. Means to evaluate the effectiveness of the hypothesised approaches needed to be included in the program.*

Attempts have been made in this version to address the main concerns raised by the ISPC regarding prioritization. First, a framework of hypotheses has been established so that there are now clear links between the Global Hypothesis and the Component Hypotheses related to the specific goals of the CRP (pgs. 14-17). The hypotheses are then translated into guiding research questions together with rationales, methodologies and research outputs within each SRT (pgs. 33-70). However, the ISPC questions whether the hypotheses are suitably formulated.

During the first 3 years, most of the work will be done in the four priority Tier 1 Action Areas. Active R4D platforms will be established in all Action Areas by the end of Year 3. Many of the objectives of CRP 1.2 should be at least partly addressed in the four Tier 1 Action Areas which, due to their current development and being the recipient of most available bilateral funding during this period, should provide outputs and outcomes indicating the feasibility of the program. That said, there is no guarantee that the complex R4D approach proposed, as well as the existence of active R4D platforms is the most effective approach to achieve poverty reduction, improved household nutrition, improved systems productivity and natural

resource integrity in the humid tropics production system compared to other less complex and human capital intensive approaches.

In this context, it is stated (page.101) that the design of CRP 1.2 research is underpinned by the Sustainable Tree Crops Program (STCP) for West Africa (Box 11; Appendix 2) and the SSA-CP CIALCA in Lake Kivu, Central Africa (Boxes 7 & 11; Appendix 3). Both operate a set of integrated research activities closest to the vision of CRP 1.2 and both of these sites will be in priority Action Areas. And, presumably, both initiatives have been successful or they would not have been selected as the “flagship” sites. CRP 1.2 will have to build on on-going research in other Action Areas (currently funded by bilateral funds) but will need to re-design this research to fit into the R4D approach over the next 3 years to meet the CRP 1.2 design. Rather than putting all of CRP 1.2’s eggs in one basket, it could be more prudent to explicitly test the approach against “flagship” and existing successful but less complex approaches in the selected Action Areas. In addition, as this research is already agreed under bilateral funding, it may not be easy to redesign it unless agreements with donors are modified. This may only be possible if the donors are convinced that the R4D approach is appropriate to achieving the objectives of the funded work. The ISPC suggests that the opportunity presents itself to compare different approaches to achieving poverty reduction, improved household nutrition, improved systems productivity and natural resource integrity in the humid tropics production system rather than re-designing them at this stage? This would also provide valuable lessons for rolling out the R4D approach.

**Response to ISPC must-have 2:** This version of CRP 1.2 has partially addressed the main concerns raised by the ISPC regarding prioritization, but fundamental concerns remain about a lack of comparative approaches and the fact that the research hypotheses are not testable.

**ISPC must-have 3:** *Identify impact pathways for the new research that map directly, through aggregated research outcomes where necessary, to the SLOs.*

This version of CRP 1.2 provides considerably more detail on and structure to impact pathways in Section 5 of the proposal. Section 5.7 p83-85 describes the CRP as an impact pathway in itself – this is useful but one would expect this to be integral to all CRP’s. The Proponents acknowledge that the proposal has a current weaknesses in its consideration of impacts on poverty. In spite of the improvements made in CRP 1.2 to address the ISPC must–have 3, the ISPC have several concerns which are detailed below.

First, the proponents of CRP 1.2 have now developed a detailed implementation plan linked to the main objectives of the project with activities, outputs and outcomes which include 29 activities and 98 time-bound milestones (Appendices 6 & 7). This has potentially enhanced the ability to map outputs and outcomes to the SLOs. However, many of these milestones are “process” milestones under the R4D approach which gives an impression that the “process” appears to take precedence over the material outcomes. We still find the R4D approach to be prescriptive and somewhat regimented – use of terms such as partners being “escorted” through the process seems to be contrary to stimulating innovation. It remains puzzling as to how some of the “process” milestones will contribute to outcomes that lead to impacts on poverty reduction, sustainable intensification, reduced child malnutrition and improved NRM management – here the impact pathways are still not clear and there appears to be a disconnect between the outputs and the outcomes.

Secondly, the apparent lack of mapping the agreed and existing milestones in the bilateral projects (which make-up about 50% of the budget for the first 3 years [\$24.0 to 26.8 million]) to milestones in CRP 1.2 is still a problem. Some donors might be aggrieved at the lack of clarity and transparency of their contributions

to CRP 1.2 and this may affect future bilateral funding in Phase 2. This could readily be addressed in the proposal.

Thirdly, several other CRPs have included *ex ante* impact assessments to give credence to sections on impact pathways and mapping outcomes to the SLOs. However, the proponents of CRP 1.2 have declared that such assessments cannot be done at the level of production system. Perhaps not, but they could be done at Action Area level particularly if the Action Area has a dominant cropping system such as cassava-based or crop-livestock-based. There are a number of recent papers reporting innovative methods for *ex ante* impact assessments at cropping system level and *ex ante* impact assessments of the highland maize-livestock system in Kenya (part of one of the four Tier 1 Action Areas) have been done by ILRI (Kristjansson et al.). The value of including relevant *ex ante* impact assessments needs to be revisited as it would strengthen the CRP's case for achieving impacts.

Fourthly, there is a strong focus in CRP 1.2 on achieving development outcomes through the generation of international public goods (IPGs), many of which are, initially, methodological and process goods. These could be considered "non-traditional" CGIAR IPGs, as was raised in the introduction section. Traditional CGIAR IPGs include: knowledge, products and services and institutional capacity building. In the context of the CGIAR, the terms 'public goods' and 'international public goods' have been the subject of some debate in recent years (see Ryan<sup>1</sup>, 2006; and Sagasti and Timmer<sup>2</sup>, 2008). Neither study makes specific reference to methodological and/or process international public goods.

It is likely that new criteria will be needed to evaluate the impacts of non-traditional IPGs such as those produced by CRP 1.2 e.g. the numbers of people influenced by R4D approaches and how this leads to impact. Even with the best approaches, the maximum effort in forming R4D platforms and a wealth of innovation systems partnerships as well as state of the art process IPGs, there is no certainty that their activities will lead to measurable impacts on the SLOs. This CRP could be described as an innovative experiment in social development which may have wider benefits to local, regional and national society than envisaged by the described outcomes. It may also exacerbate rural-urban migration as more confident and able people move to cities to capitalise on their enhanced entrepreneurial capacities. This cannot be captured by the current version of this CRP.

**Response to ISPC must-have 3:** This version of CRP 1.2 has made a notable attempt to identify impact pathways for the new research that maps through aggregated research outcomes to the SLOs however attention to the four issues raised above would further strengthen its potential to achieve impacts.

**ISPC must-have 4:** *Similarly, the different elements of gender to be included in a gender strategy need to be drawn together coherently and linked to the processes of technological innovation and research.*

This 'must have' was considered to have been satisfactorily addressed in previous versions of CRP 1.2, with gender equity and welfare aspects and objectives adequately mainstreamed. That said, as mentioned earlier, the ISPC believes the section on gender in section 7 of the third version to be somewhat generic.

**ISPC must-have 5:** *Consider the best means to address high priority research to enhance the contribution of tree crops to livelihoods in the humid tropics.*

This version of CRP1.2 has added further information on tree crops in SRTs 2.2 and 2.3 as well as in Appendices 2-5 where much of the agricultural research information is now elaborated. In addition, a new

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<sup>1</sup> [http://www.sciencecouncil.cgiar.org/fileadmin/user\\_upload/sciencecouncil/SC\\_5\\_Meeting/Item\\_13\\_IPGs\\_R-D\\_Continuum.pdf](http://www.sciencecouncil.cgiar.org/fileadmin/user_upload/sciencecouncil/SC_5_Meeting/Item_13_IPGs_R-D_Continuum.pdf)

<sup>2</sup> [http://www.cgiar.org/www-archive/www.cgiar.org/pdf/ir\\_sagasti\\_timmer.pdf](http://www.cgiar.org/www-archive/www.cgiar.org/pdf/ir_sagasti_timmer.pdf)

short sub-section 5.6.3 (p83) has been added as a useful example of how innovation in tree crop R4D is mapped to the SLOs. The sub-section states that tree crop intensification interacts strongly with CRP 4 Nutrition and Health, CRP 6 Forests and Trees and CRP 7 Climate Change, however some of these links still need to be developed. Within Tier 1 Action Areas, the potential of tree crops e.g. cocoa, coffee, banana, oil palm, rubber and tree crop-livestock systems to contribute to livelihoods in the humid tropics is highlighted (Pp158, 168, 175 and 183). An concern is that it is still impossible to assess the proportion of resources that will be allocated to tree crops vs annual crops – 10%, 20%, 25% etc. Hence the priority being given to tree crops remains unclear.

**Response to ISPC Must-have 5:** The contribution of tree crops to livelihoods in the humid tropics has been clarified and enhanced in this version, but this contribution has not been quantified.

**ISPC Must-have 6:** *Show how, and in what time frame, the program will change from the current aggregation of partner Centers' research to new place-based research according to the hypotheses and models espoused, and with an appropriate growth rate and budget.*

Based on CRP 1.2's definition of place-based research as separate Centers no longer working on their own agendas at their own locations but working together in selected locations to solve multiple farmers' problems in an inter-disciplinary manner, there is a noticeable attempt in this version of the proposal to move to this mode of collaboration during Phase 1 of the CRP. IITA has clearly embraced the R4D mode of working and engaging with partners. However, it is not as clear whether other Centers are as comfortable with the approach. This will be critical to the smooth transition in Phase 1 to fully place-based research. Hence, the planned time frame is still considered to be ambitious and risky – even in the four priority Tier 1 Action Areas - for transforming existing programs to the envisaged R4D innovative integrated systems approach. Clearly the proof will be in the outcome but the proposal does show a strong willingness to move in this direction especially in Section 9 (pp104-111). Further elaboration about new ways in which Centers will work together is also given in Section 8 on Innovation.

The budget for partners and collaborators has been defined as \$28 million but this has not been disaggregated. It is considered to be inadequate but a reflection of what is available among collaborating CGIAR centres. Furthermore there is no growth in this budget over the three years of Phase 1 (approx. \$9.4 million per year). There are still considerable gaps in partnerships especially necessary private sector partners in some Action Areas. Whether they exist in some areas can be questioned. This version of the CRP still lacks a detailed strategy to engage with new types of partners (e.g. health, education [both important in tackling child malnutrition] or ICT partners) with reliance only on other CRPs where links still need to be made.

**Response to ISPC must-have 6:** This version of CRP 1.2 has provided more substance as to how the program will change from the current aggregation of partner Centers' research to new place-based research according to the hypotheses and models espoused, however the timeframe is ambitious and risky; the budget for partners and collaborators is static; and there is still a lack of imagination in the types of partners to be engaged.

**ISPC must-have 7:** *Present new governance arrangements that will enable growth of a new CRP1.2 for humid zones as a genuinely cross-Center program working effectively with external partners.*

The main concern of the ISPC was in relation to the governance arrangements at the Action Area level. In particular, the ISPC asked for evidence of genuine cross-Centre collaboration with external partners. CRP 1.2 has responded to this request with the help of the Action Area workshops in establishing greater flexibility within Action Areas and the sharing of oversight among Centers across the three main geographical regions: Africa, Asia and the Americas. The Advisory Committee, with its role in relation to ‘priority setting, partnerships and the strategic allocation of resources’, should have a key responsibility for ensuring that this decentralisation is transparent and well-coordinated.

At the same time, there remain some inconsistencies in the roles and responsibilities of various players involved in governance (p113). For instance, the IITA DG is given a role of resolving conflicts between partners. This is made more difficult if the IITA DG is only an observer on the Advisory Committee (AC) as it is unclear in which forum he will resolve conflicts.

**Response to ISPC must-have 7:** This version of CRP 1.2 shows some improvement in fostering growth of genuine cross-Center collaboration and improved working relationships with external partners however there are still some inconsistencies in the documented governance roles and responsibilities.

### **Assessment of response to Fund Council Must-Haves:**

**FC must-have 1.** *Need to demonstrate genuine cross-Center collaboration and with development results as the key objectives, a key objective of the reformed CGIAR system.*

Response to ISPC’s must-haves 6 and 2 above covers this. Further assessment is provided under the response to FC must-have 5 (see below).

**FC must-have 2.** *Make a convincing case that the proposal will make a difference for the people of the humid tropics and will have an impact on the 4 System Level Outcomes of the CGIAR.*

Response to ISPC must-haves 2 and 3 above covers this. Concerns remain as to how methodological and process outputs will directly contribute to outcomes and to the four SLOs. The success of the R4D approach may result in rural social development that enhances migration out of rural areas.

**FC must-have 3.** *Clearly outline what needs to be achieved and what is going to be achieved; the proposal needs to be clear on the program’s deliverables.*

Response to ISPC must-have 3 above covers this. There is still room for improvement on how the program will achieve its deliverables.

**FC must-have 4.** *Provide further justification for the dominant focus on humid lowlands as opposed to humid tropical highlands.*



Response to ISPC must-have 1 above covers this.

**FC must-have 5.** *Clearly elaborate on the cross linkages with other CRPs; it is not clear how these collaborations will work in practice as the current proposal does not integrate clearly issues such as climate change, deforestation, agroforestry or nutrition.*

Response to ISPC must-have 6 partly addresses FC must-have 5. Section 9 of this version of CRP 1.2 provides more detail as to how it will work with other CRP's. A detailed Table 13 (Section 9.1 pp105-106) identifies which partner Centers in CRP 1.2 are also involved in other CRPs. In addition, partner Centers that are lead liaison for other CRPs are also identified. This is certainly a start in identifying where there is potential for developing collaboration but it is a long way from establishing active links.

Collaboration between CRPs will arise through common interests and participation in the development of CRP 1.2 but it is not clear how and whether this will happen especially as the Center staff in some CRPs may not be the same as those who are involved in CRP 1.2 There is a limit to staff time in being involved in too many CRPs. The links with CRPs 5 and 7 are elaborated well as was the case in the previous version of this CRP. Therefore there is now greater recognition of potential synergies with other CRPs, in particular the other 'systems' CRPs, although the lack of explicit linkages at activity level in those CRPs does not give confidence as to what will be implemented.

CRP1.2 is significantly dependent on other CRPs to feed technologies into the humid tropics production system. No doubt some of these technologies have already been identified as this would have directed the choice of target sites/action areas: none of the partner Centers is starting from scratch. However it is not clear how CRP 1.2 will influence/link with other CRPs for generating new technologies as new problems are identified. Other CRPs may not have the flexibility or even priority interests to respond.

**FC must-have 6.** *The section on proposed partnerships requires clarification on the basis for engagement of the different partners (including farmer organizations, NGOs, extension workers, and the private sector).*

Response to ISPC must-have 7 above covers this.

**FC must-have 7.** *Capacity development should focus not only on production research, but also on skills required for opportunities in post-harvest innovation and value addition, or new approaches to knowledge sharing, scaling up and fostering small enterprise.*

Met in previous version.

**FC must-have 8.** *Justification for high level of overhead cost component in the budget should be included.*

Met. A justification for revised overhead costs for the CRP based on agreed Center practices is provided in section 14.2 (p127) of the revised proposal.

