

## ISPC commentary on the CRP on Roots, Tubers and Bananas Phase II – Pre-proposal (2017-2022)

### Summary

The CRP on Roots, Tubers and Bananas (RTB) is founded on clear comparative advantage for the CGIAR and is well conceptualised with strong and stable management. The pre-proposal for the second phase is generally of a very high standard. The role of other CRPs and partner organisations are explained succinctly and with great clarity. The theory of change and impact pathway for RTB is clear, focused, logical and plausible. The targets outlined are clear and plausibly attainable, though it will be a significant challenge to collect the data that will examine whether these targets have been reached.

Governance, gender and capacity-building are all given satisfactory treatment in the pre-proposal, however more could be done to critically examine what, if anything, the CRP hopes to achieve on rural youth issues. Analysis of gender, youth and capacity-building issues would be strengthened by a clearer distinction between current-day production by smallholders, and the shift taking place towards greater commercial production of RTB crops. The implications of such a shift for gender research, economic opportunities for young people, or the appropriate role of capacity-building are quite profound and worthy of reflection before the full proposal is written and presented.

RTB has undergone a prioritization process *within* RTB crops but, as yet, has not managed to transition from the pre-CRP legacy shares of budget to a more strategic allocation of resources *across* RTB crops. The scientific basis for a cluster of activities on *in-situ* conservation, in the otherwise excellent flagship project 1, was not made convincingly. RTB management should reflect on the limited scientific value and long-term implications of the establishment of a “global network for *in-situ* conservation of RTB crops and some crop wild relatives”. The argument for investing limited funds into *in-situ* conservation must therefore be carefully examined, particularly in relation to the added-value for the conservation and use of genetic resources within the CGIAR system.

Of greatest concern is the role of flagships 5 and 6 in the CRP. Flagship 5 is based on a large chunk of the HumidTropics CRP, and the quality and clarity of the section on this flagship is out of keeping with the rest of the pre-proposal. The work in the geographic clusters is very labor intensive and site-specific, and the descriptions of the cross-cutting clusters 1 and 2 do not convey the impression that this will be brought together into a framework that would allow international public goods to be generated. With flagship 6, the case for a stand-alone flagship has not yet been made. RTB management should reflect carefully on how best to organize the work described in FP 5 and 6.

**Recommendation:** The ISPC considers this pre-proposal **Satisfactory with adjustment**, and recommends inviting the proponents to submit a full proposal, taking into account the ISPC’s comments below or providing a justification for the lack of change:

- RTB should consider whether the research proposed in flagship 5 is of a sufficient quality. There are high opportunity costs of having below-par livelihoods work in this CRP as there are many other potential partners that could play that role.
- RTB should look carefully at the structure of the CRP as a whole before deciding how the clusters of activity under FP 6 are incorporated.
- RTB should outline the role of the cluster of activity on *in-situ* conservation more clearly, building the scientific case for its inclusion around potential linkages with the *ex-situ* genebanks as well as explaining in more detail the rationale for the geographies involved.
- A number of points that are to be highlighted by the forthcoming CGIAR independent evaluation of RTB will need careful attention in the full proposal. In particular, the need to shift the allocation of budgets across crops onto a more strategic basis rather than a continuation of pre-CRP “legacy” trends is becoming urgent. Furthermore there is overlap between Bioversity and IITA with respect to banana breeding and other potential efficiencies that should be addressed in the context of the main objectives of the CGIAR system reform.

[Score: B]

### 1. Overall analysis as an integral part of the CRP portfolio      Score: A

The CRP on Roots, Tubers and Bananas (RTB) is a well-managed and focused CRP. The pre-proposal for the second phase reflects this as it is a clear, thoughtful, well-argued document. It is the ISPC’s belief that this clarity of explication is strongly correlated with the quality of the underlying program of work, in particular its coherence, and the ability of its management team. The overall impression is of a CRP with an established niche, and one that is emblematic of the comparative advantage of the CGIAR. The emphasis on “discovery” in the Theory of Change and throughout the document is very welcome.

There are approximately 300 million poor people who depend on RTB value chains for food security and income. The pre-proposal aims to contribute to CGIAR SRF SLOs and IDO targets by giving priority to 26 countries where RTB crops are particularly important. Included in the set of 26 countries are 17 (out of the total of 20) countries selected by the Consortium for CGIAR site integration, and all 6 of the countries that have been earmarked for fast-tracked, more intensive integration. The RTB proponents make a strong case for CGIAR investment, particularly given limited private sector breeding investment in these crops and countries.

Linkages to the other CRPs have been thought through clearly, with the specific roles to be played by other CRPs and partner organisation elucidated for each flagship project and summarised in excellent, easy to reference tables that succinctly explain the role played by each partner. Collaboration with Genebanks, A4NH and CCAFS is strong, and interactions with the other agri-food systems CRPs is minimal. A big change from Phase 1 is the incorporation of a significant chunk of what is currently the HumidTropics CRP, under flagship project 5 on integrated systems for improved livelihoods. This might be interpreted as an opportunistic move on the part of RTB, one that may well prove to be strategic in the long-run, but there are risks. Incorporating part of a CRP that is at a much earlier stage of developing priorities into a well-prioritized one has opportunity costs – hypothetically, RTB might have found another locus of expertise for the work on systems and livelihoods that was

stronger. As it stands, the section on FP5 is rather weak, and is out of keeping with the excellence of the rest of the pre-proposal. For this second phase, there must also be a question mark over site integration and how much of the soft infrastructure of HumidTropics has been brought over as part of the CRP. These are important points to be clarified in the full proposal.

Throughout Phase 1, the ISPC encouraged RTB to develop their competitive model of flagship products, under which business cases for continued investment were put together for more than 20 areas of research, led by a flagship product. Much time and energy was put into this process over the period 2012 – 14, and these business cases were externally peer-reviewed in May and June of 2015. In the current pre-proposal for Phase 2, there is only limited recognition of this process, as follows: “Detailed feedback informed the feasibility of each cluster and their integration into FPs. And although reviewers found business cases generally solid, they drew attention to gaps and inconsistencies that led to ongoing reformulation of the FP descriptions and their incorporation into this pre-proposal.” Which were the areas that lost out in the process of prioritization? Which areas gained higher priority and more funding? The proponents should indicate how, and to what extent, the budget given in Annex 1 was based on priority setting between and within flagships. In particular, the question of relative allocation across crops is one that the forthcoming independent evaluation will highlight as needing attention. To date, the CRP has focused a lot on prioritization within RTB crops, but the funding shares of the RTB crops remains somewhat fixed by pre-CRP legacy shares rather than being based on a strategic assessment of need.

There is a clear and logical structure for the CRP, with interlinked flagships related to discovery (Flagship 1), delivery (Flagships 2, 3 and 4), integrated livelihood systems (Flagship 5) and impact at scale (Flagship 6). Despite concerns regarding the plans for flagships 5 and 6, the flagships together add up to a program that offers much more value than the sum its individual constituent parts. The scientific arguments used in the pre-proposal rationale are rigorous and credible.

## **2. Theory of Change and Impact Pathway**

**Score: A**

The theory of change and impact pathway for RTB is clear, focused, logical and plausible. The targets outlined in Table 1 are clear, concise and plausibly attainable though it will be a significant challenge to collect the data that will examine whether these targets have been reached. Figure 1 on how the FPs combine, and the accompanying table that demonstrates expected IDO contributions from each FP is a clear summary and allows the reader to consider how the CRP is aligned with the SRF IDOs and Sub-IDOs. The main outcomes – included in the consolidated performance indicator and budget matrix (Annex 1) – align with SRF sub-IDOs, which will provide the basis for results-based management (RBM) in this CRP. There is strong commitment to RBM, following on from a prior learning platform grant from the Consortium for piloting results-based management in the CRP.

One aspect that leaves a slight doubt, particularly with regards to impacts on poverty and food security, is the issue of who the growers of RTB crops are in the focal countries. With a few possible exceptions, there is likely a transition underway, to different extents, from family subsistence operations to commercial market oriented production. However, there is little discussion of this question despite the fact that this has major implications for impact

pathways from research. One can presume that more commercial operators will have more access to inputs and expertise independent of the CGIAR than is the case for smallholders.

### **3. Cross-cutting themes**

The pre-proposal considers gender integration and how to mobilize women and other disadvantaged social groups, including youth. The on-going Phase 1 CRP developed an integrative gender research strategy that will ensure key gender equity issues and opportunities for women and youth are addressed in its following Phase 2. The mainstreaming across the RTB agenda is impressive and is explained in Annex 2. Stakeholder planning workshops were able to identify enabling and disabling factors, which are mostly related to the capacity of beneficiaries to adopt research outputs and favorable agricultural policy. Each flagship impact pathway develops further on capacity development interventions. However, in the gender discourse, the issues in small-medium enterprises and commercial farming systems are confounded with those in family run subsistence situations. It would seem that the two situations are quite different. Gender differentiation in a family must be different to gender differentiation in a specialized enterprise and yet this distinction is not made or reflected upon.

There is only limited attention given to the specific problems of youth and what, if anything, the CRP will do to help overcome them. All FPs present the means by which capacity development activities intend to contribute to impact pathways, though the information provided on this specific aspect is very general, making it difficult to produce a meaningful assessment.

### **4. Budget**

Despite the great and correct emphasis given to gender issues at this CRP, the overall budgeted assigned to this topic at each FP feels somewhat disproportional – nearing 11% of the total, and more than 3 times the budgeted allocated to management. This level of investment deserves a better justification on the absolute numbers (due to the emphasis), even if their relative repartition among FPs makes sense. Genetic enhancement (Flagships 1 and 2) gets 46% of the proposed budget, while integrated systems for improved livelihoods (Flagship 5) accounts for 21%. Integrated crop management (Flagship 3: 13%), postharvest processing (Flagship 4: 9%) and scaling (Flagship 6: 11%) make up the rest of the budget allocation. Such resource allocation shows the priority focus for this CRP, which is likely quite appropriate based on previous returns to research investments.

### **5. Governance and management**

**Score: A**

The governance structure follows the basic one proposed in the second call guidelines and seems appropriate for the size of the CRP and its range of activities, covering research on six important staple food crops (potato, cassava, yam, sweet potato, banana and plantains). The nine-member steering committee, whose Chair is elected among the independent members, includes only three CGIAR staff (RTB Director, Directors General of the lead center, and of another participating CGIAR center). The management committee, whose Chair is the RTB Director, includes Deputy Directors General-Research for each of the four participating CGIAR centers, and CIRAD on behalf of French partners. The flagship leaders and the gender coordinator meet monthly to report and plan research. The full distribution of labor and most of the responsibilities are implicit and not discussed in detail, something that should

be developed more comprehensively at the full-proposal phase. Compared to the current CRP approved governance, the suppression in this pre-proposal of the Science Advisory Committee deserves further explanation, as it was a concrete demand for governance improvement made by FC in 2011. Further definition of the roles & responsibilities of the Flagship Project and Activity Cluster leaders is needed and how they will relate to the Management Committee.

The RTB Director, and most flagship leaders are highly respected scientists with managerial experience, and the collective impression is of a good track record of research achievements. The partnership strategy links with the CGIAR capacity development strategy, and there is an excellent level of clarity regarding the relevance of partner organizations, their level of engagement and commitment, for each flagship description.

## 6. Flagships

### **FP 1: Discovery research for enhanced utilization of RTB genetic resources** A

This is a very coherent and clearly described flagship focused around the goal of improving rates of genetic gain in traits valued by producers across the RTB crops. The five clusters of activity are complementary to each other, with a strong selection of partners whose roles have been thought through very clearly and described succinctly. Activity cluster 1 is a “breeding platform” that will address the problem of the “persistent, low level of interaction among breeders, molecular biologists, genebank curators, and social scientists”. Activity cluster 2 focuses on next generation breeding which will apply new technologies to the specific challenges posed for crop improvement by the unique biology of RTB crops. Activity cluster 3 is where transgenic science is located within RTB, organized around “game-changing traits” that cannot be introduced through traditional breeding methods. There is a strategically intelligent commitment to moving beyond the science and into communication for policy about the importance of these traits and the benefits of a transgenic approach. Activity cluster 4 relates to *in-situ* conservation, particularly of crop wild relatives for RTB crops. Activity cluster 5 governs the interaction between the CRP and the proposed Genebank CRP, focusing on how new science can help increase the value of the accessions in the genebank for breeding.

Conceptually, activity clusters 1, 2, 3 and 5 fit together nicely, but the FP should develop the agenda on activity cluster 4 with some degree of caution, particularly in relation to the range of potential conservation activities involved, despite their great relevance in the context of genetic resources national and international strategies. The long term implications of investing in "a global network for *in-situ* conservation of RTB crops and some crop wild relatives" must be carefully examined, particularly in relation to the added-value for the conservation and use of genetic resources within the CGIAR system.

The flagship theory of change aligns well with the SRF sub-IDOs. This discovery flagship will rely on DNA-level characterization, digitalization, automation, and big data for developing efficient breeding technology, which should allow the CRP to quickly address demands from producers, markets and consumers. CGIAR Centers participating in the CRP have the staff and infrastructure that enables the integration between discovery and delivery research, and to develop a broad range of partnerships. Table 1.2 gives an overview of partners and their role in developing a product or achieving an outcome.

This flagship will follow a gender-sensitive approach for building advanced science capacity through various means, including training, staff exchanges, learning materials, use of regional initiatives, and access to advance labs. The pre-proposal acknowledges the regulatory and public acceptance challenges associated with transgenic breeding. This flagship will work with Flagship 6 to evaluate the possible consequences of the new technology and define gender-sensitive, development-oriented research strategies. Genetic gain metrics according to trait and target geography are given in a Table for year 2022. These targets were defined as levels to be achieved after extensive on-farm, farmer-managed multi-location trials in target population of environment, and are ambitious but plausibly achievable.

The proposed funding request gives priority to the activity cluster on accelerated discovery and incorporation of new traits into the RTB breeding pipeline that relates to the sub-IDO on increased conservation and use of genetic resources. The main comparative advantage of RTB is the extensive genetic resources base and hundreds of accumulated years of research experience with conventional breeding of vegetatively propagated crops in the CGIAR. This flagship brings together this expertise with that of key partners from advanced research institutes, NARS, private sector, NGOs, as well alliances of women, whose names and roles are given in the partnership strategy's table.

## **FP2: Adapted productive varieties and quality seed      A**

This is another excellent flagship project with a clearly complementary set of activities organized to achieve well-specified targets. Activity cluster 1 has a cross-cutting approach carrying out socioeconomic research on seed systems issues for all RTB crops. By contrast activity cluster 2 has a focus on banana seed systems; activity cluster 3 focuses on cassava seed systems; activity clusters 4 and 5 examine potato seed systems in Africa and Asia, respectively; and activity cluster 6 and 7 are on sweet potato and yams, respectively.

The impact pathway shows that next users of this flagship's research outputs will be those engaged in client-oriented cultivar selection, with the aim of incorporating bred-germplasm into resilient cropping systems, processing, and nutrition-responsive value chains. The expected CRP outcomes align with various sub-IDOs, whose quantified targets for 2022 are given in a table indicating the total number of beneficiaries and countries. Partners are again well described, even if they are not as obviously strong as for FP1. Previous projects and activities were indicated in the pre-proposal but without elaborating in depth the lessons learned, except for integrating gender into thematic research in seed systems to avoid excluding women and other groups from the benefits of improved RTB propagules. One concern might be the lack of a track record for the flagship leader on seed systems issues, rather than on genetics and plant breeding, which is arguably the "bread-and-butter" of RTB.

FP2 will use gender-responsive approaches to increase equitable access to propagules of cultivars showing appropriate traits for food security and markets. It will consider how cultivar introductions have a differential impact on women and youth in order to address any potential concerns properly. This flagship's capacity development includes strengthening technical skills of breeders and farmers, processors, and seed multipliers; gender-sensitive approaches and participatory research methods to identify end user preferences, and in cultivar selection, seed interventions, and business models; degree training and postdocs; and innovative learning materials and approaches.

The Theory of Change for FP2 is logical and credible, focused on linking varieties with seed systems, through to livelihoods and food security. This flagship gets the largest proposed funding for this CRP, and gives priority to activity clusters related to enhancing genetic gains, both of which seem to be appropriate. Arguably this is the flagship where considerations of gender, youth and enabling environment are most important and there should be more attention given to them in the full proposal. The focus given to capacity development in FP 2 is convincing.

### **FP3: Resilient RTB crops    A**

This flagship focuses on biotic and abiotic stresses of RTB crops. There are five clusters of activity specialized by RTB crop in specific regions, complemented by two cross-cutting clusters: 1) on pest and disease surveillance and modeling, and 2) on yield gap diagnostics to facilitate sustainable intensification. The five crop-specific activity clusters are: 3) fusarium wilt in bananas; 4) bunchy top disease in banana in Asia and Africa; 5) BXW in banana in East and Central Africa; 6) cassava in Asia and Latin America; and 7) cassava in Africa.

FP 3 has outcomes that target smallholder farmers, and aim to strengthen food security and improve natural resource quality and ecosystem service provision. The impact pathway is credible and clear, drawing on Flagship 2 products, namely bred-germplasm, for further participatory selection and adaption to user needs under an integrated pest management approach that favors alternative non-chemical means. Target sub-IDs are related to increased resilience, reduced losses and closed yield gaps and are appropriate for the research.

Its novel science refers to using both conventional and biotechnological techniques for strategic research to elucidate complex interactions between RTB plants in diverse environments. The application of next-generation diagnostics, mobile communication and data-handling systems, as well as a significant partnership with a private sector company, Fera Science Ltd., give the impression of a flagship that is innovating. The flagship leader has a recognized track record of achievements on what should be regarded as the main crop for this CRP in the priority target area: i.e. cassava in Africa. The pre-proposal gives some information on previous projects and acknowledges that it builds on what was achieved in RTB Phase 1, particularly research in cross-center projects by multidisciplinary, multi-institutional teams.

A specific objective of this flagship is developing R4D capacity that supports resilient RTB cropping systems by strengthening institutions and establishing learning platforms on integrated crop and pest management, and uses a gender-sensitive approach that will empower women at national and regional levels. The strategic relevance to the CGIAR of this work is unquestioned, and the comparative advantage of RTB partners to lead is similarly clear – they have unparalleled expertise in these clonally propagated crops in terms of pest and disease characterization and management, and in agronomy.

### **FP4: Nutritious food and value added through post-harvest information    A**

This flagship project aims to harvest the potential for RTB crops to make nutritional improvements in diets, and is organized into four clusters of activities. Activity cluster 1 is cross-cutting and combines research on economics, social and technological factors that

promote or constrain the potential for improved processing, or that determine the role that RTB crops can play in a nutritious diet. Activity cluster 2 focuses on cassava processing centers, and builds on the varietal improvement work in FP 2 and the seed systems work in FP 3. Activity clusters 3 and 4 focus on nutrient-rich crops – biofortified cassava, and sweet potato, respectively – through a focus on the evidence of nutritional efficacy, in order to influence policy and value chains.

The expected outcomes – which align with sub-IDs on optimized consumption of diverse nutrient-rich foods, diversified enterprise opportunities and more efficient use of inputs – will contribute to making affordable, nutritious food available for many millions of the world’s malnourished people and will speed processing and postharvest innovations to expand production and consumption of RTB crops, and add value with the aim of raising incomes for poor people. This flagship acknowledges the need to account for potential unintended consequences on SLOs that are not the primary focus of its research.

Its novelty of science relates to research methods models for strengthening food quality and safety, and linking value chain-demanded attributes to genomic-led breeding (Flagship 2). The candidates for the flagship leadership show, as per their CV, track record of achievements on nutritional quality, processing, utilization, product development and scaling-up. This flagship builds on progress made by on-going Phase 1 on using RTB staples in healthy and diversified diets, but the proposal does not elaborate further and in-depth the lessons learned. Orange-fleshed sweet potato is undoubtedly the flagship product for this flagship project, given the CGIAR-generated evidence on the nutritional efficacy of its consumption, but the full proposal would benefit from some critical reflection on what we know to date about adoption and consumption of OFSP across Africa, and how this flagship project will fill knowledge gaps (particularly relevant for activity cluster 1). A concern with this flagship is that there is no consideration of how the scale of production and processing may be changing over the life-time of the CRP (particularly relevant of activity cluster 2), and what the implications of that would be for research. There are also a number of interactions reaching out to the other FPs in RTB, which might suggest that the structure or division of work across FPs isn’t quite right. This is also worthy of some critical reflection before the full proposal is written. If the structure stays as is proposed here, the interactions across FPs led by different CGIAR centers will be an important role for the flagship leaders and RTB Director.

The partnerships established in Phase 1 give this flagship a unique position to successfully carry out its ambitious agenda. For example, the RTB team has skills on sensory analysis and consumer preferences research, which will help ensure that improved products meet consumer expectations. The pre-proposal lists the criteria used to engage in partnerships, and provide the names and roles of those who will be involved in developing a product or achieving an outcome. The full proposal should elaborate further on alternative providers beyond the RTB partnerships, to re-assess its comparative advantage in the activity clusters, and to reflect on the relationship with A4NH.

The flagship acknowledges gender issues as a key social factor mediating the link between nutrition and agriculture. Equally, RTB crops may in some cases offer great opportunities for women. Risks regarding the enabling environment are acknowledged by the proponents in the flagship impact pathway, and the capacity development strategy gives priority to NARS research capacity and to strengthening boundary partners for research uptake. The budget given to this flagship is the smallest within the CRP, but it seems to be appropriate, as there is much to draw on from the other FPs that support the work in FP4.



## **FP 5: Integrated systems for improved livelihoods**

**C**

Flagship project 5 on integrated systems for improved livelihoods represents a significant proportion of the HumidTropics' place-based research agenda. The flagship project comprises two cross-cutting activity clusters on: 1) analyzing sustainable intensification; and 2) institutional innovations and decision-support to help enhance technology adoption. The cross-cutting clusters support four geographic clusters of place-based research in: 3) East and Central Africa; 4) West Africa lowlands; 5) Central Mekong; and 6) Tropical Americas and Caribbean.

This flagship aims to strengthen the enabling environment for technology adoption through innovation platforms, participatory appraisals, quantification of synergies and trade-offs at farm and community levels, and proactive engagement with institutional partners from both the private and public sector and by improving partners' capacity to innovate. However, the quality and clarity of the section on FP 5 is out of keeping with the rest of the CRP pre-proposal, raising some questions for RTB management to consider. There is a risk that this FP could undermine RTB, with little prospect of a substantial pay-off as currently described. The work in the geographic clusters is very labor intensive and site-specific, and the description of the cross-cutting clusters 1 and 2 does not convey the impression that this will be brought together into a framework that would allow international public goods to be generated. **The Theory of Change for FP 5 is much less convincing than for the rest of the CRP, and should be re-thought as a collaborative effort with the leaders of all FPs, and not just re-written.** The products from FP 5 are more general, and vaguely described, than in the rest of the CRP, and are arguably more statements of desired future situations rather than research products. **If FP 5 is to stay in the CRP, then the full proposal will need to clarify how the integrated farm system innovation platforms would actually work.** RTB leaders have done a good job in terms of seeking commitment from partners along the impact pathway but nonetheless this section on FP 5 gives the impression that these steps are bigger than the legs that are making them. The targets for the number of potential beneficiaries seem implausible.

Were FP 5 to be successful, then the links to sub-IDOs on diversified enterprise opportunities, closed yield gaps, optimized consumption of nutrient-rich foods, and diversified and intensified agricultural systems that protect soil and water are all conceptually consistent with the FP Theory of Change. The text states that the FP will build on a key lesson learned from on-going RTB and HumidTropics, namely that "the livelihood systems approach looks at all components of the system in an integrated manner rather than the individual parts." Hence, its activity clusters will use integrated systems analysis tools to understand, communicate, and manage trade-offs and synergies between targets. The flagship leader does have a track record as a systems agronomist working on sustainable intensification of perennial-based cropping systems (involving two RTB crops) in Africa's humid zones.

## **FP6: Impact at scale**

**C**

Flagship project 6 is a cross-cutting flagship that supports the efforts in all the other flagships to achieve outcomes. There are three clusters of activity dedicated to: 1) knowledge sharing and capacity-building; 2) gender analysis; 3) foresight and impact assessment. It is unarguable that RTB is a particularly results-oriented CRP, and these research support functions in FP 6 are aimed at maximizing the chances of research in the other FPs having an

impact. The impact pathway integrates with and enhances other flagships' impact pathways to support their outcome delivery. The selection of "grand challenges" that the FP responds to is something of a stretch: "growing importance of nutritious and diverse agri-food systems and diets; climate change; diminishing genetic resources; and post-harvest losses". **While the impact pathway for achieving development outcomes from FP 6 is clearly mediated through the effectiveness of the rest of the overall RTB portfolio, this section was an opportunity missed to articulate how the specific contributions of FP 6 would respond to other more proximal (but still "grand") challenges.** An example might be public skepticism over the effectiveness of international aid - still an ambitious challenge to tackle, but one that aligns more obviously with the work being proposed in this particular FP.

Gender and capacity issues are central to the work proposed in this FP. Two of its activity clusters provide the basis for its approach to capacity development, which is a critical element of its outcome support. Capacity development will focus on upgrading partners' skills in translating and customizing research outputs into products, and in brokering relations between the various and diverse stakeholders. The FP is hoping to influence the BINGOs (Big International NGOs) on specific issues within agriculture which is a risky strategy but one that could have significant impact if it were to be successful. The FP leader is well-qualified for this work, and having a young female scientist in a leadership position in the CGIAR is very welcome. The work described in FP 6 can, and should, build on a strong tradition at CIP for impact assessment and foresight studies. At Bioversity International, another of the core CGIAR CRP partners, the Institutional Learning and Change (ILAC) initiative has for many years covered similar ground to that which is proposed in FP 6, but arguably with a more modest track record. **Getting the right mix of staff on board with the right competencies, in what is quite a broad area of research and research support, will be a challenge and it would be reassuring in the full proposal if this could be elaborated on at length.**