

ISPC Commentary on proposal CRP 5: Water, Land and Ecosystems

Summary

CRP5 focuses on three critical issues: water scarcity, land degradation and ecosystem services. It seeks to differentiate itself from crop- and systems-based CRPs by addressing natural resource constraints at a river basin and landscape scale rather than the field to farm level. Underpinning this CRP is the understanding that sustainable natural resource management is a prerequisite for poverty alleviation and food security over the long term. To achieve its goal, CRP5 has a broad vision and an ambitious agenda that includes research components spread across a wide spectrum of disciplines, scales and geographic contexts. It involves an impressive number of partnerships involving CGIAR Centers, other CRPs, NARES, NGOs, universities and government and international agencies.

The rationale for a coordinated international research effort on water scarcity, land degradation and threats to ecosystem sustainability related to agriculture is well argued, and it has the potential to fill a critical gap in the CGIAR research for development portfolio. CRP5 includes eight Strategic Research Portfolios (SRPs). For the most part, the focus is on research and outputs at the landscape to river basin scale—with some notable exceptions. The proposed SRPs on Basins, Irrigation, Groundwater, Rainfed and Information Systems can be seen as the central core of an approved CRP5. The Resource Recovery and Re-use SRP represents a relatively new and innovative component, and the Pastoral Systems SRP holds promise if it can be better linked to other CRPs with livestock systems components. In contrast, the Ecosystem Services SRP and, to a large extent, the Rainfed System SRP, are diffuse and weak in research strategy and implementation plan. Coverage of gender, research, communication and knowledge management are satisfactorily addressed.

A basic problem with CRP5 is that it represents a collection of existing research activities placed into an SRP portfolio without benefit of a prioritization framework to guide the amalgamation and resource allocation process. Insufficient attention was given to identifying the most critical river basins, groundwater resources, and agricultural systems where solutions to water and soil constraints have greatest potential for impact on CGIAR SLOs, and to align research plans accordingly. As a consequence, the eight SRPs remain largely independent and self-contained. While the need to complete research projects currently in progress is acknowledged, the bridge to a new agenda is lacking. Moreover, linkages with CRPs that focus on food security are surprisingly sparse despite the fact that the crops involved have a dominant impact on sustainable use of water resources in irrigated systems that rely on ground and surface water, and given the stated need to “...*quickly learn to produce more food with less water and land while at the same time reversing the widespread degradation of the natural resource base that sustains agriculture and the livelihoods of millions of small farmers the world over.*” [p 1]. While the potential trade-offs between productivity gains and ecosystem services are frequently mentioned in the first part of the proposal, there is very little research in the SRPs *per se* that directly addresses this critical issue.

While the proposal describes the questions to be pursued, and the outputs and outcomes expected from on-going projects, not enough is said about new science and innovative approaches that take advantage of the new CGIAR and its partners. The Lessons Learnt sections make a start but fail to provide the critical analysis, theory and narrowing of issues and hypotheses that support a prioritization framework for the SRPs and the overall research agenda. Moreover, the quality of

science appears to be highly variable, with some individual components quite good and others less so. CRP5 rarely discusses in any depth potential international public goods (IPGs), alternative research suppliers, and comparative advantage of the proponents and its partners to lead this work. Although the proposal lists a number of partners, it lacks an explicit partnership strategy. The total budget indicated for both “enhanced” (\$569 million) and “baseline” (\$479 million) scenarios is significant, and the proportion requested from the Fund is not evident.

The proponents suggest that the proposed management structure is lean and economical, but the structure outlined is vague and incomplete. It emphasizes the relatively low cost and gives little attention to effectiveness. Given the large number of partners and the SRP x Site Management structure, success of this CRP depends heavily on effectiveness of the SRP and Regional Managers. Little is said, however, about how performance of these managers will be facilitated and monitored.

As it now stands, this CRP is a risky investment. A more coherent and compelling proposal is needed.

Recommendation: The ISPC recommends that the proposal be substantially revised and re-submitted with particular emphasis given to the following main points:

- Develop a framework to establish research priorities and a SRP portfolio to address them based on formulation of hypotheses about the causes of constraints and their potential solutions. In developing hypotheses, objective evaluation is preferred to one that accepts assumptions underpinning current activities.
- Narrow the focus and improve the clarity and plausibility of SRP research outputs and outcomes, and the descriptions of the impact pathways; carefully consider the time and skills needed to achieve the expected outcomes.
- Clearly identify what is new and the value added contained in the SRPs compared with existing Centre and Challenge Program work, and provide an appropriate plan for phase-in of new and phase-out of current activities.
- Develop a more coherent and systematic organizing structure to achieve better integration across Basin, Irrigation, Rainfed and Groundwater SRPs because solutions to constraints within each are interconnected. Consider a “nested” SRP structure with Basins as the highest order, with Irrigation and Groundwater (merged) and Rainfed and Pastoral Systems (merged) underneath. SRPs on Information and Resource Recovery and Re-use might stand alone or their components could be integrated into the other SRPs.
- Mainstream the ecosystem services perspective across all SRPs; give greater attention to better understanding trade-offs between productivity and other environmental services.
- Clarify the value added of research activities in the Rainfed SRP, including much stronger linkages between research outputs and production of IPGs. Because SRP-Rainfed represents 27% of the total CRP5 budget, the IPSC suggests substantial scaling back and tighter focus of proposed activities under this SRP.
- Explicit linkages are needed between the Pastoral SRP and other CRPs with livestock systems research components.
- Coherence and coordination are needed across CGIAR and CRP sentinel research sites to ensure the best underpinning science is used for effective and efficient metrics and monitoring of current status and trends in water, soils, and biodiversity resources as affected by agriculture.
- A vision for irrigated agriculture to support agricultural development in SSA, and how CRP5 can facilitate it, is needed in a revised proposal.
- Proposed research and development partnerships should be better justified and integrated into the narratives, including defining a *modus operandi* and comparative advantage.
- Program management and governance should give greater emphasis to management effectiveness rather than cost. Proponents might consider merging the Scientific and Impact Advisory Committee with the Steering Committee. Because successful implementation of CRP5 depends on the effectiveness of SRP and Regional Site Managers, explicit procedures are needed for monitoring performance and supporting these managerial positions. An independent oversight body is lacking and should be incorporated into the governance and management structure.

1. Strategic coherence and clarity of Program objectives

Justification for CRP 5 within the Strategy and Results Framework of the new CGIAR is based on the supposition that the capacity of agriculture to provide incomes for poor farmers, ensure food security, and improve nutrition is dependent on sustainable management of water, land and ecosystems within agricultural systems. The stated goal is ‘*to sustainably improve livelihoods, reduce poverty, and ensure food security using research-based solutions to water scarcity, land degradation, and threats to ecosystem sustainability*’. CRP5 seeks to complement productivity- and systems-focused CRPs by addressing natural resource constraints at river basin and landscape scales rather than the field to farm level [Fig 1.4]. Hence, CRP5 seeks to fill the natural resource management (NRM) research and development niche within the CGIAR portfolio, which would add value to the other CRPs with an emphasis on productivity, while recognising the need for sustainable approaches. Although the vision and justification are strong, the current CRP5 proposal fails to deliver a coherent approach.

Notwithstanding statements about integration being a key feature of CRP5 (e.g. “*integrating SRPs within and across regions*” on p. 25), the eight SRPs remain largely independent and self-contained. How these eight SRPs fit together into a coherent and unified strategic program is not apparent, nor how each will contribute to the CRP’s overall goal. In large part, the proposal appears to be a collection of current activities amalgamated into a CRP framework. As such, it is missing a systematic organizing framework to guide prioritization and coherence of the research programs (discussed below). Additional clarity is also needed on definition and linkages between outputs and objectives of this CRP. For example, CRP5 outputs listed on page 18 are really the objectives and could be used to replace those given on page 17. Likewise, although some of the SRPs are better explained than others, the objectives of most SRPs can be described more clearly and with greater specificity, and these more tightly linked to the CRP 5 objectives.

Elements of an overall framework can be gleaned from different parts of the proposal. A key statement reads: “*Critical to CRP5 will be analyses that demonstrate how diverse land uses across landscapes and basins interact to impact on the natural resource base that sustains agriculture and ecosystems and how governance and management can improve sustainability and livelihoods*” [p. vii]. The ISPC believes this offers a new approach with exciting potential. Logically, this argues for a nested SRP framework in which the Basin is analysed on the basis of land and water allocation to agroecosystems (irrigation, rainfed, pastoral, and forests) nested within. Ground- and surface water and soil resources provide the natural resource inputs to these agroecosystems, which gives tremendous potential for bringing new science and technologies to bear on their inventory, metrics, monitoring, function, and interactions in relation to food production, human well-being, and ecosystem services. Instead, CRP5 studies production systems in a rather conventional manner as stand-alone SRPs on Irrigation, Rainfed, and Pastoral systems. A better theoretical framework could help streamline this SRP and facilitate the identification and focus on IPGs.

A concern arising from reviewing the overall strategy and the proposed SRPs is that CRP5 is not sufficiently differentiated from continuation of what Centers are already doing. A recurrent statement within several SRPs is that “*for the first three years of the CRP, existing projects will need to continue as they are in order to satisfy the requirements of their donors*”. Without a strong organizing framework, it is difficult to see how CRP5 programs will make the transition from “old” to “new”. The strategic process for guiding this transition should be explained—from the set of current activities to a portfolio of research that achieves the Vision laid out in the prologue.

The proponents note there are “*Many alternative suppliers [that] conduct NRM research (universities, foundations, international NGOs, multinational corporations, think tanks)*”, but the description of the CRP5 comparative advantage is vague. Evidence to support the statement that “*Few can bring together the scale or scope of partnerships the CRP5 can leverage; few others aim to transfer lessons learned in one part of the world to another; and few are dedicated to the creation of global public goods*” is not strong enough, and a revised proposal should emphasize how this advantage is incorporated into the proposed activities in the SRPs.

2. Delivery focus and plausibility of impact

Justification for an integrated approach to NRM research that focuses on agricultural water productivity, soil resources, and ecosystem services is strong. It is, however, a huge challenge and there is danger that CRP5 is spread too thinly to succeed in achieving impact. On the other hand, while some key issues related to resource use and degradation are mentioned in the overview (e.g. erosion, land degradation), they have little visibility in the SRP agendas.

Several SRPs fail to demonstrate how the proposed research activities and outputs relate to the overarching goal statements. Some of the proposed outcomes are incongruent with the narrow scope of proposed activities and lack corresponding outputs, e.g., in SRP 1 and SRP 2. The fragmented nature of the research outputs list in SRP 2, for example, seems independent and pays little attention to identifying and producing IPGs. More generally, much of the apparent disconnect between activities and outputs and higher level strategic goals can be explained by the fact that research programs are largely continuation of existing projects and few research outputs extend beyond these current projects. As a result, impact pathways are simplistic and not well defined. This can be seen in Fig. 1.5, which excludes the political economy. In revising the research programs there is an opportunity to improve clarity and plausibility of research outputs, outcomes, and impact pathways.

A major challenge for CRP5 is to confront the relative paucity of evidence that past CGIAR NRM research has achieved measureable impact. Can the program confidently link NRM research under CRP5 to a 15-20% increase in productivity of 500,000 households in 10-15 years? Generally, most SRPs need stronger justification that the scope, number of activities, number of stakeholders involved and timeframe are reasonable and achievable. For example, one of the goals of CRP5 is to halve the number of areas and people that have unsustainable use of groundwater, and to give increased gender equity to 250 million people in SSA [p. 74]. While clearly laudable goals, how will these impacts be traced back to specific NRM research outcomes and outputs? Likewise, the feasibility of achieving many of the targeted results from basin-specific research outputs in three years [p. 110] seems unrealistic given the difficulties of overcoming vested interests likely to resist change. While the proponents should be commended for ambition, it is important to recognize the enormous difficulties of reaching actionable consensus among stakeholder groups (including crop farmers, fishers, livestock producers, government agencies, and environmentalists) so as to modify sensitive institutional and political issues governing allocation and management of water resources.

The gender research strategy and capacity building plans proposed seem adequate and appropriate, even though more attention could be paid to youth and minority groups to extend beyond the male/female discourse.

3. Quality of science

The CRP5 research agenda places emphasis on more effective governance of natural resource inputs to agriculture, and in management of these resources within agricultural systems. The approach taken is one in which '*research problems come from theorizing about the changes we would like to see*' [p. 21]. Identified research issues are therefore developed from the proponents' experience as well as the literature, as are the options for change. While acknowledging the experience of those involved in determining these research problems, it is not clear that this process provides the type of objectivity required of the scientific method. The failures of alternative irrigation management strategies that are usefully documented in SRP 1, for example, lead to an oversimplification of the overarching 'problem': the inadequacy of main system management. No conceptual analysis is provided to substantiate this claim. Likewise in SRP 6 (Pastoral Systems), specifying the approach to change without a comprehensive analysis of cause-effect relationships also is problematic.

A preferred approach would be to start at a more basic level – to test hypotheses relating to the root causes of a problem and using theory to help establish hypotheses about solutions. Building on the

causal relationship, one formulates approaches that solve, or mitigate, the problem with the overarching goal of achieving outcomes consistent with CGIAR SLOs. This process also involves hypothesis testing: Change 'x' delivers outcome 'y' in resolution of the issue of concern. Using this approach there is less potential for researchers in CRP5 over-emphasizing continuation of current activities and approaches rather than grounding a new agenda in solid theory that is appropriately tested for the circumstances under consideration¹.

The absence of reference to and engagement with academic and policy debates on a number of highly relevant issues is surprising. The importance of economic globalisation in agriculture, either through food and input prices, or through the controversial process of land control change called 'land grabbing'. Neither the Basin, Irrigation, nor Groundwater SRPs reference the widespread debates and social activism around themes of 'water justice', 'privatisation', and 'rights based approaches' to development. Regardless of viewpoint, these perspectives and approaches are part of active dialogue in the 'land, water and ecosystems' domain with significant material consequences, as visible for example in proliferation of water and other resource conflicts in certain parts of the world.

There are also different 'theories of change'. CRP5 suggests implicitly that the proposed analysis and courses of action are the 'logical' way forward – something that is actively debated in the literature on NRM, environmental governance and development. Given the program's emphasis on institutions, governance, access, equity and inclusiveness, a more thorough review of the literature on problem framing is required to provide the critical context. For example, from the text of the Irrigation SRP about accountability needing to be established before tools can be taken up [p. 40] – a rather substantive literature on accountability could be made use of for strategic thinking – on corruption for instance, and on the 'politics of irrigation' more broadly. Generally, the program text lacks reference to a sense of change as a political process involving alignment and negotiation of interest groups. In terms of the design and implementation of a research program as an inclusive socio-political process, the absence of citations about trans-disciplinary research models, which have addressed these issues extensively for NRM-focused research, is notable.² Indeed, the proposal tends to avoid explicit socio-political analysis of government behavior and policy processes. By default, this de-politicizes understanding of change and transformation.

Overall, the CRP5's discussion of hypotheses, scientific approaches and methods should be made more evident in the text. As it now stands, the quality of science appears to be highly variable, with some individual components quite good and others less so. Generally, it is difficult to find research outputs that can be considered IPGs. For example, much of the proposed participatory research on Pastoral Systems is highly location-specific and it is not clear how results can be effectively scaled up or understood in a broader scientific context. The rationale for the watershed approach to NRM in the Rainfed SRP comes from a limited number of studies by a particular research group. There is little evidence that the approach is scalable or rigorously validated by others. As such, it is a risky proposition for a key component of the SRP commanding the largest share of total CRP5 budget (equivalent to Irrigation, Groundwater, Pastoral and Resource Recovery and Re-use together). Moreover, while the Rainfed SRP starts with the assumption that most constraints are due to institutions and policies, research outputs are mostly conventional biophysical watershed technologies that are by nature location-specific. The overall impression is one of trying to do too much and more

¹ An example of this potential problem is the emphasis given in the proposal to issues of 'equity' and 'access'. Ensuring 'equitable access' to land and water resources is stated to be a goal of the research process, but it is also taken to be a change option that will stimulate the achievement of desired outcomes. First, there are no careful definitions of these terms and confusion can arise as a result. For instance, equity can be defined in terms of opportunity or outcome. While the former is generally applauded, the latter can be the cause of resource over-use and subsequent degradation. Likewise, access can be available but unconstrained or it can be available only through securing well-defined and well-defended private or communal property rights. Going back to establish the causes of land, water and ecosystem over-use helps straighten out these matters and the establishment of tight hypotheses requires the formulation of strong definitions of the terms involved in the hypotheses.

² The main exception to this is the SRP on Pastoralism which uses a language of participatory action research and negotiation, which is absent from other SRPs.

of the same. Much greater focus and clarity in establishing output-outcome linkages will be critical to success of a revised Rainfed SRP.

The SRP on Irrigation is focused on Asia and Africa, yet the proposal fails to present a vision for irrigated agriculture to support development in SSA where less than 5% of arable land is irrigated. Indeed, there would have not been a green revolution in Asia without massive investment in expansion of irrigated agriculture. Can there be a green revolution in SSA without a vision for the role of irrigated agriculture in this transformation? Who best to provide the vision than CRP5?

One of the more innovative aspects of CRP5 is the work on Resource Recovery and Re-use (SRP 5). This is a relatively new area of research for the CGIAR and moves it well outside the ‘rural development box’. It will be important for the program to keep a tight focus on cost effectiveness because there are many technological options available for recovery and re-use of nutrients and water but few are economically feasible. With so many other actors in the private sector engaged in health, sanitation, water and agriculture related issues in peri-urban areas, it is essential that this SRP identify its comparative advantage and niche with regard to work proposed under this SRP.

The Basin SRP could be improved by tightening linkages between broad development questions like “what are the most appropriate ways to govern river basins” and specific research hypotheses, informed by results from recent research from the CPWF. Issues related to uptake and use – presumably one of the main challenges in this SRP – need more attention.

The Ecosystems SRP appears to be an eclectic collection of academic topics without a rationale for prioritization or focus. The proponents do not fully acknowledge the complexity of the underpinning science and the resources required to make progress on addressing the issues. Furthermore, although the prologue nicely describes all of the relevant ecosystem services (Fig. 1.2), only two ecosystem services are considered in this SRP. Indeed, while the potential trade-offs between productivity gains (the “provisioning” ecosystem service) was frequently mentioned in the overview, there is very little research in this or any other SRP directly addressing the issue. Yet, exploring trade-offs between productivity growth and loss of environmental integrity is fundamental to the CGIAR SLOs on food security and sustainable management of natural resources. More generally, agriculture has impacts on the natural resources, and changes in state of natural resources have impact on agriculture in ways that must be better understood. The CGIAR has a comparative advantage to provide this knowledge, which provides the foundation for assessing potential trade-offs between productivity and ecosystem services. Therefore ecosystem approaches should be mainstreamed within all SRPs.

The Information SRP proposes to work at two levels: agro-ecological information systems at global to regional scales; and sentinel site surveillance systems for monitoring land and water problems and risks and evaluation of interventions. The sentinel sites proposed in CRP5 appear to be additional to those proposed by CRP6-Forestry and by CRP1.1 Drylands, and it is likely that many of the system- and crop-focused CRPs will have long-term experimental sites. Rather than set up stand-alone sentinel sites for CRP5, there is an opportunity to play a central coordinating role in monitoring current status and direction of change in metrics governing water resource availability and quality, soil quality, other ecosystem services including biodiversity sensitive to agricultural practices at these sites. Investigating relationships between the capacity to provide ecosystem services and the ability to increase food production capacity, or the trade-offs therein, could also be evaluated with similar metrics across all CGIAR sentinel sites and long-term experiments. There may also be an opportunity for global intellectual leadership in developing and validating robust, low-cost metrics to benchmark current status and monitor trends in environmental performance as a means to link small farmers to opportunities for environmental service payments, and for marketing of environmentally certified products in global markets.

In summary, more time should be dedicated to revising the scientific approach of this CRP and to reconsidering the time and skills needed to achieve the expected outcomes. Greater emphasis on IPGs, more formal linkages to other CRPs, and a tighter focus on fewer SRPs are recommended.

4. Quality of research and development partners and partnership management

Recognition of different types of partners, the need to map the existing partnership web, and establishment of a working group to monitor progress and provide feedback are all good ideas. Early involvement of stakeholders and end-users of research is commendable.

The endorsement of CRP5 from 14 CGIAR Centers is encouraging. However, attention is drawn to two points: (i) Given that forests are a dominant ecosystem in many tropical basins, potential collaboration with CRP6-Froestry is limited to three lines (pg 149), and (ii) CIMMYT is the only Center which did not sign on although wheat is largely an irrigated crop and CRP3.1-Wheat includes research on water management and conservation farming. It clearly makes sense to pull CIMMYT into this CRP and to explore expanded linkages with CRP6, perhaps at the sentinel sites.

Connections between CRP5 and some CRPs are well described and others are vague. While linkages with CRP1.1 (drylands) and CRP7 (climate change) are clear, one would also expect to see strong linkages between CRP5 and other CRPs of the major staple crops that are grown under both irrigated and rainfed conditions within major river basins and deltas. Although overlaps between work proposed under CRP5 and other CRPs are noted in the proposal, the best way to manage potential duplication and to leverage synergies and complementarities are not elaborated. More explicit linkages are needed between the SRP on Pastoral Systems and other CRPs with livestock systems components. The potential for collaboration at sentinel sites was mentioned earlier. Tables have been used in other CRPs to show linkages, overlaps, and collaborations with other CRPs and could be included in Annex 6.

The FAO partnership on system modelling and associated in-kind contributions to the CRP are promising. Assuming a revised proposal, CRP5 has potential to leverage impact by working with large investors in irrigation technologies and river basin management where multilateral financial institutions have billions of dollars at stake. Beyond FAO, the proposal is missing an explicit partnership strategy and only provides a list of partners. In fact, most SRPs have the same list without justification or discussion of roles, comparative advantages, or position in the impact pathway. In SRP5 (Resource Recovery and Re-use), for example, more could be said about how partnerships with private sector interests will work.

While it's encouraging to see wide endorsement from many partners, this points to the challenges CRP5 faces in putting together a strong and coherent partner strategy and then mobilizing those partnerships to achieve results. An additional risk for the partnership strategy and its management is the critical role to be played by SRP Managers and Regional Leaders (chosen from among Center partners). The SRP Manager is a lynchpin, not only in facilitating and managing partners within the framework of a research portfolio, but also in effectively managing the program overall. Although a detailed description is provided of the roles of the Manager and the Regional Leader positions in implementing the CRP [p. 25-29], there is little mention about how the quality of SRP management will be monitored and sustained. The skill set required to play this role may not be readily available within the existing research staff of participating Centers. But even if it is, there is still a strong rationale for bringing the development and oversight of managers into the CRP itself to assure that it has the leadership needed to succeed.

5. Appropriateness and efficiency of Program management

The attention given to marketing, communication and knowledge management is welcome. The role of SRP-Information in informing M&E and future impact assessment is credible and good innovative practice. In terms of capacity building, however, for a program with a budget potentially reaching \$550 million for 5 years, a more responsive to this need and with larger investments in this area would seem to be essential. Without proper investment in capacity building, CRP5 risks setting up a system in which the local stakeholder is consulted but does not have the skills and expertise to act.

There are some worrying statements about cost effective management, such as: “...is designed to minimize transaction costs and maximize ownership, transparency and participation”. The management mechanism should be designed primarily to ensure cost effective delivery of research outputs and impact. Investors need to have confidence that CRP5 will indeed be a *program* of research and not a portfolio of individual projects. Although the proposal asserts that the management structure is lean and economical and avoids creating its own bureaucracy, the structure outlined only appears that way because it is vague and incomplete. A general dispersion of management tasks to the participating Centers may create the illusion of low cost program management, but it risks having the proposal under-managed and under-resourced. According to its budget projections, CRP 5 will need to mobilize substantial resources, yet the staff capacity to do this (except to say it will be part of the Program Director’s job) is not provided for.

Management Oversight and Coordination. Apart from the fiduciary role that IWMI’s board assumes as lead Center, CRP 5 lacks strong internal mechanisms for independent oversight. *The Steering Committee* is not constituted to play that role and the *Scientific and Impact Advisory Committee* does not have the standing.

Management Committee. Although the role of the committee is well defined and supplies the necessary level of coordination and monitoring across all the critical elements of the proposal, it does not have a clear mechanism for appointment of its members or criteria for inclusion. A four member committee seems small but holds the promise of being efficient and free of the burden of an overly representative body. There is some indication that the committee could be expanded to include the SRP Managers – even though it is surprising that the SRP Managers are not automatically considered as members. If the committee is function well, the Program Director should have a role in shaping the committee’s membership and determining its optimum size.

Program Director. The Program Director appears to have the authority and scope of work to lead and manage the program effectively. The assignment entails both management of the program and a role as the external face of the CRP, and provides a good balance with the role of IWMI and its DG as the lead Center. This position will manage a budget proposed to be larger than the largest CGIAR Center.

Scientific and Impact Advisory Committee. This committee is not fully conceptualized in the proposal. It is not clear who appoints its members (although GFAR will nominate one member), whether they have terms, and how the chair is identified. It is assigned a supporting function to the Management Committee rather than the Steering Committee, which dilutes its influence. While the advisory committee might be valuable to the Management Committee, CRP5 requires a visible and influential point in its structure where participation and authority is not determined by the level of investment—financial and in-kind—made in the program.

6. Clear accountability and financial soundness, and efficiency of governance

Financial Soundness. Steering Committee composition and the CRP’s lack of an independent oversight body will present potential challenges in allocation of resources, particularly if funding falls short of estimates. To minimize potential for conflict and in the absence of any change to the proposed Steering committee, CRP5 will require a very robust Monitoring, Evaluation and Learning (ME&L) function and a commitment to use the Science and Impact Advisory Committee as a critical input in determining the most effective allocation of resources. This is not to undermine the role of the Program Director in shaping and recommending annual budgets and work plans, but the decisions of the Steering Committee, given its composition, are vulnerable to second guessing.

A pie chart [Figure 3.5] shows the percentage of the total program budget contributed by CGIAR Centers, which provides useful insight into the relative investment each of the 14 Centers is making to CRP5. It also helps explain the composition of the Steering Committee, which includes only those Centers with a partnership share of 6% or more. While the proposal indicates that \$569 million will be

required over five years to fund the proposal, there is no reference in the narrative and no clear indication in the budget of the total dollar amount requested from the Consortium. Based on percentages that appear in the closing paragraphs of the proposal [p. 185], the gap between resources in hand and resources required is \$274 over five years (51% of \$537).

The budget section lacks a consolidated presentation of projected income that indicates how much of the funding for the CRP is currently available through restricted and unrestricted funds from each of the participating Centers, how much is being requested in total from the Consortium, and how much the program anticipates it will need to raise for full funding. Although expenses are broken down and itemized several ways, there is no single table that brings projected annual income (and its sources) into context with projected annual expenses.

Efficiency of Governance. The absence of an independent, balanced and expert oversight body, specific to CRP5, is a concern also shared in ISPC reviews of other CRPs. In the case of the CRP5, this seems to be an effort to streamline decision making by giving the principal actors authority based on shared context and commitment, and minimizing the inefficiencies associated with delegation of authority to “outside” participants. Our recommendation to create or strengthen mechanisms that would provide an independent body for decision making and evaluation does not doubt the capacity of participating Centers to act with the best interests of CRP5 in mind. It is simply good practice in programs of this scale and complexity to have a body with a duty to be disinterested and with freedom to challenge the principal actors. While the lead Center’s Board may function as the legal fiduciary and provide careful stewardship, its ability to meet those responsibilities is enhanced, not duplicated or hindered, by independent oversight for the CRP.

Despite a role in planning, resource allocation, and in monitoring and evaluation, the Steering Committee is not structured to be an independent, disinterested oversight mechanism to the CRP. It is not envisioned to be an active body. As proposed, it is primarily a formality, a mechanism for gathering the program’s major actors once a year to review the status of the program. Not all the participating Centers have a position on the Steering Committee. Although membership is listed [p. 167], the criterion for inclusion seems linked to the relative level of investment in the CRP. While this is also an indicator of the extent of research activity that will be undertaken collaboratively within the program, the rationale does little to make the program more effective or more accountable.

A potential alternative to the current model could be to create a Steering Committee that provides partners, donors, and other stakeholders with confidence in the quality and integrity of the research agenda and its results. Rather than start from scratch, the recommendation is to merge the Science and Impact Advisory Committee into the Steering Committee. By including a balance of research expertise, development and impact specialists, and other informative and influential perspectives CRP5 could enjoy the benefits of good oversight and independent decision making. It could continue to include leadership from IWMI and introduce a rotating position/s for other major partners. Eliminating the advisory committee in favor of a stronger Steering Committee also lightens and streamlines the management structure of the program. The Challenge Program could continue to provide the initial membership of the body but the Steering Committee should adopt criteria for membership, revise its terms of reference, establish maximum terms of service, as well as a mechanism for identifying a chair for the committee.

In addition to the above, there appear to be some overlaps and lack of clarity in roles between the Management Committee and the Science and Impact Advisory Committee. It would be quite useful if, together with the Figure 3.3, the proposal provided a table summarizing the roles of each management entity.