

ISPC Commentary on the Fish Agri-food systems – Preproposal (2017-2022)

Summary

The ISPC accepts the argument that research on fish agri-food systems will be critical to achieving the SRF. However, we feel that the current CRP pre-proposal lacks coherence and clarity in some key dimensions. Although the CRP presents numerous interesting ideas and clearly makes the case for its strategic relevance, there is too little specificity about many of the FPs and a general lack of coherence within and among FPs. The pre-proposal also needs to strengthen and define its ToCs more clearly, with convincing hypotheses and assumptions, and an in-depth analysis of the CRP's comparative advantage in its proposed areas and locations of intervention.

The ISPC considers that the pre-proposal has **major concerns** which should be addressed through the submission of a new pre-proposal. Progression of such a new pre-proposal to the full proposal stage will be considered if the following key issues, further clarified in the detailed ISPC comments below, have been satisfactorily addressed:

- The CRP's analysis of sector dynamics, ToC, impact pathways, targets, and budgetary allocations need revisiting to address the issues detailed below;
- The CRP needs to show that it has selected its priority research opportunities based on its comparative advantage and address the quality of science in the associated research activities;
- The CRP needs to clarify its networking and partnership arrangements, roles and responsibilities on the basis of comparative advantage and subsidiarity;
- The CRP needs to provide a rationale for its geographical focus, and a strategy on how it will link local level multi-stakeholder partnership with higher-level alliances, thereby creating conditions for the systemic innovation that is required to attain the levels of impact indicated.

[Score: C]

1. Overall analysis as an integral part of the CRP portfolio [Score: B]

The FISH CRP aims to make a significant contribution to delivery at the CGIAR system level and to the societal grand challenges by building nutritious and diverse agri-food systems and diets; addressing unsustainable harvests of fish and other aquatic products from both farmed and capture systems; reducing postharvest losses; increasing food safety; adapting to climate change and advancing climate-smart agriculture; addressing competition for land and related ecosystem services; and creating new entrepreneurial pathways and job opportunities, particularly for women and youth. To address this broad canvas of challenges, FISH offers four approaches underpinning its pre-proposal. These include: biotechnical and practice innovations to significantly increase sustainable fish supply from aquaculture systems; innovations in systems analysis, resource use and governance; the enhancement of benefits of fish for food security and nutrition; and innovations for improving integrated livelihoods in agri-fish systems.

Strategies for Asian coastal fisheries, Asian aquaculture, and African freshwater fisheries are currently woven through the FPs in a way that is hard to follow. Changing the configuration of FPs in line with the proposed strategies to deal with the different sets of problems should

be considered to bring greater clarity. Moreover, although the scientific arguments and quality appear to be high with respect to some clusters of FP1, the discussion of what will actually be done seems to lag much more in the other flagships. Whilst this may be due to the reliance on partners to deliver parts of the CRP, or the lack of time for consultation, there is a generalised dearth of specifics about the science that will be supported in the other FPs.

The ISPC notes and commends the decision not to engage with ocean fisheries more explicitly, but the proposed focus in FP 2 appears to reflect a change in emphasis relative to the programs undertaken hitherto in the CGIAR, and needs clarification on its specific comparative advantage in looking at resource management issues in capture fisheries. It appears from the text that FISH contemplates moving more fully into the governance issues around marine capture fisheries, and the ISPC questions the CGIAR's comparative advantage in this crowded space.

The CRP mentions possible cross-linkages with other FISH clusters/flagships and linkages with other CRPs. Inter-dependencies, roles, and responsibilities, however, are not always clear in these extensive listings of cross-linkages, nor does the proposal address how the individual FPs add up to a CRP that offers more value than the sum of its individual FPs.

In designing the FISH CRP, the team has shown some propensity for institutional learning. The document should provide more information, however, on the scientific progress that has been made in the past 2-3 years. The FISH pre-proposal also highlights its integration of the recommendations from the recent IEA evaluation of AAS. In its current form, however, the document does not show that it has effectively thought through how best to meet two fundamental challenges of research design: (i) to focus on a limited set of research questions and locations so that available resources can be effectively deployed; and (ii) to test hypotheses concerning the benefits of integrating social change research and agriculture research.

In terms of its geographies, the FISH pre-proposal needs to provide additional clarity on its strategy for how the research outputs from the specified countries will be utilised to maximize the IPG benefits across other countries and the selected FISH CRP regions. In other words, how will this CRP deliver more than a set of country research programs? How will it deliver broader impacts across geographies and how will it contribute to the broader CGIAR portfolio? In that respect, it is also important to note that whilst focus countries (but not necessarily in-country partners) are named for each part of this CRP and the proposal refers to links with other CRPs, it does not give details on site integration with other CRPs.

The FISH CRP enumerates an impressive list of partners, but there is little clarity on the nature of the partnership arrangements, what these organizations and individuals aim to get out of the collaboration, and how well their institutional priorities align with those of the CGIAR and this CRP. The document provides some examples of lessons learned from the ongoing LF CRP, but these are mostly restricted to general descriptions on what has been done. Limited information is presented on how the proposed research agenda builds on, and has been shaped by, earlier results.

2. Theory of Change and Impact pathways [Score: B]

The FISH CRP does not provide an overall theory of change section or a CRP impact pathways diagram. It develops both for each FP through high level, abstract diagrams, expressed in general terms as non-specific beliefs as to the power of research outputs to make

a difference, rather than as grounded arguments based on evidence or through clear hypotheses and assumptions.

In respect to the alignment with the SLOs, the evidence given in the pre-proposal for reducing poverty through aquaculture (SLO1) pertains to a study in one country (Bangladesh), and as pointed out, is still lacking for most fisheries. For SLO2, the evidence given for improving food security and health through fish is available mainly for aquaculture. However, fish consumption and accessibility studies are generally lacking for fisheries communities. For SLO3, little proof is yet available for how to address the great challenge of improving NRM in fisheries, although how to do this in aquaculture is probably more straightforward.

In terms of prioritization, part 1D of the CRP tabulates target beneficiaries and countries and relates to SRF IDOs and sub-IDOs, while Part 1B aligns IDOs and sub-IDOs with quantified expected performance outcomes for each flagship and respective budgets. It does this, however, without indicating whether the resource allocation was based on careful reflection on scientific and partnership opportunities, needs, and challenges. In that respect, including its impact logic related to systemic change, or indicating how its activities, outputs and partnerships can be used to bring about systems level changes that support the attainment of macro-level development goals, would strengthen the proposal significantly.

3. Cross-cutting themes

The CRP presents a clear understanding that women-as-beneficiaries are an important target. What is less apparent, however, is how this affects the selection of research topics or priorities for the CRP. Additional clarity is also required on how gender-related activities will be articulated with other CRPs and CGIAR programs. The CRP does not appear to include a strategy for addressing the specific problems faced by youth in aquaculture systems.

The term “enabling environment” is used several times in the document, but the meaning of this in the context of the CRP and its flagships is not expanded upon. The CRP does have a significant focus on changing the policy environment. From the current write-up, however, it is not clear whether the research plans adequately recognize the challenges of operating in the complex (and unpromising) policy environments that characterize a number of their target countries.

Climate change, fish resource sustainability, needs for agri-diverse food systems, post-harvest losses and new job opportunities are all given a measure of prominence in the proposal. Less attention is paid to water supplies (despite IWMI’s presence in the CRP), erosion of genetic resources/biodiversity, and competition between aquatic systems and other agricultural systems for land and other resources. Issues related to likely trade-offs, and in particular feed resources, are mentioned in passing, but not conceptualized in any concrete terms.

Each flagship does address elements of the CapDev framework, although little substance is provided on what will be specifically done, or how they might be articulated with other CRPs and CGIAR programs.

4. Budget

The current request, at a level of *c.* US\$80 million per year with 40% expected to come from W1/2, presents a considerable increase over past support. The potential impact from this CRP is high, however, and there is clearly external support for this CRP. Further arguments to support the requested increases and clearer FP implementation strategies and expected outputs

would address any doubts on the ability/capacity to effectively use the budget in the delivery of the CRP. Clarification is also required on the level of funds suggested to support developed country research capacity, which are likely to be high relative to the (yet unnamed) partners in developing countries.

In respect of the allocation across FPs, it may be useful to consolidate the substantial overlaps between FP3 and FP4. These two FPs seem to be closely linked conceptually, and it is not clear if there is a logical reason to separate them. If any resources could be recovered through merging the two FPs, it would seem to make sense to allocate these to FP1. Currently, this FP, the only FP directly aimed at improving productivity in these production systems, appears to be under-resourced at only 30% of the total.

5. Governance and management [score C]

FISH is a new CRP and hence a new governance, leadership and management structure will be established. The CRP is invited to carefully check the IEA review on CRP Management and Governance, as part of the proposed arrangements appear to run contrary to this review's observations on independence and legitimacy.

The proposal provides limited indication of the criteria/ToRs for the selection of a new CRP leader, which makes it difficult to judge the overall leadership of the CRP. Nevertheless, the intention to seek high level scientific leadership is commended. The track record of those included in the proposal ranges from outstanding in some clusters, to average and unknown in others. Of those that are unknown, many have outstanding academic track records in development research, but not necessarily in aquatic resource areas.

The FISH pre-proposal does not present a clear networking or partnership strategy on how the research outputs from the specified countries will be utilised to maximize the IPG benefits across other countries and the selected FISH CRP regions. In that respect, it is also important to note that focus countries (but not necessarily in-country partners) are named for each part of the CRP as well as links to other CRPs.

6. Flagships

6.1 Technologies for sustainable intensification of aquaculture [Score: B]

The strategic relevance of the FP and its five premises are well-founded, but the ToC itself reads like a mission statement. It is difficult to assess what the actual programmatic agenda will consist of, and the proposed impact pathway is vague on how different scales of farming will be addressed. The document is silent with respect to the potential social consequences of larger more vertically integrated farm businesses. In science terms, most research will build on the work established under L&F and AAS, with the exception of applying genomics selection to tilapia and carp. In other clusters, few details are available to assess the novelty and soundness of the research.

More insights need to be presented about the aquaculture systems of interest, and, the apparent dearth of relevant developing country partnerships needs to be addressed. The currently identified partners appear to add value in terms of scientific and technical research expertise, but less so in terms of building developing country capacity to continue this work long-term.

The FP makes repeated references to the gender dimensions of fish systems, but includes very little discussion on how this might actually feed into the scientific program. It is not clear whether the gender analysis and understanding are actually used in shaping research priorities. Youth is mentioned in passing, but not conceptualised in any concrete way. The FP aims to work across all nine elements of the CapDev Framework, focussing mainly on training and training materials. The budget, given that this is the only FP directly aimed at improving productivity in these production systems, might benefit from efficiency saving achieved through the consolidation of the overlaps between the FP3 and FP4.

6.2 Sustaining fish production systems [Score: B]

The FP's premises are that (i) good ecological and socioeconomic evidence base will help policy decisions; that (ii) foresight and scenario analysis, with multi-stakeholder engagement will help policy decision-making, and that (iii) trade-off identification can be linked with human values to improve resource management and sustainability. These premises, however, do not appear to have been examined in the context of evidence of previous successes and failures in sustaining fish production / capture systems. As a result, the FP makes no explicit reference to how the research priorities have been informed by past learnings or through new priority setting efforts.

In its proposed mix of science and policy-oriented research, the proposal needs to flesh out the types of issues that will be researched and will need to develop arguments for any synergies with the other work of the CRP. The ISPC particularly questions the comparative advantage of this CRP taking on a major role in discussing the management of global oceanic fish stocks – a subject in which there are many other institutions with established expertise. Moreover, it would be helpful to see how the research proposed in this FP on institutions and policies would intersect with similar work in PIM (especially on the governance of common resources) and perhaps other CRPs.

The FP's developing country partners remain largely undefined, and the apparent absence of a strategy to link local level partnership to groupings that have legitimacy and carriage for policy and institutional change at higher scales might make its objectives difficult to achieve.

The FP discusses gender (and youth) at length, but it is not clear how this has shaped activities. In addition, the FP needs an analysis on whether it makes sense to spend a lot of effort developing recommendations for sustainable management practices if there are no clear impact pathways or partnership/network arrangements to implement these? The FP aims to work across all nine elements of the CapDev Framework, focussing mainly on training and training materials.

Given that this is the largest single FP in terms of budget, more information is required on what the requested funds will cover and deliver based on a clear identification of its comparative advantage, as well as the rationale for specific cluster allocations. In addition, an indication is required of the percentage of the FP resources expected to be funded from W1/2, as opposed to reflecting bilateral funding on topics where donors have specific interests.

6.3 Fish value chains and nutrition [Score: C]

The ToC states that research can inform a combination of shifts in policies, public sector investment and private sector adoption of technology innovations to drive value chain improvements, leading to measurable increases in access to fish by poor households. It is

hypothesized that the approach will enhance dietary diversity and other nutritional benefits, in particular for women and children.

This FP is clearly strategically important, but whilst the work needs doing, the pre-proposal remains too vague on the actual content of the flagship. What exactly will be done? And where? And how? In that respect, whilst the clusters look novel and includes potentially useful areas for research, the FP presents too little information to judge the scientific quality of the proposed activities. This relatively new area for the CGIAR appears to be gaining ground from its experiences in L&F and AAS. It needs, however, to guard against a tendency for advocacy, and to expand its attention to local partners and uptake pathways.

The rationale behind combining the value chains with the nutrition work requires further elucidation, as does the much-needed inter-CRP collaborations with PIM, A4NH, and perhaps other CRPs in this area. In that respect, interaction with the crop CRPs in relation to feed systems also requires further attention.

The flagship intends to work across all nine elements of the CapDev Framework. These include innovative learning approaches, developing learning materials, developing future research leaders, and institutional and organizational strengthening, but details of how these activities will contribute in the delivery of the CRP are scarce.

The FP contains some excellent discussion of the role of women in aquatic agriculture systems. There is less discussion, however, on the implications this has for the research agenda: Will the value chain research actually look different because the people writing the proposal are so clear on the importance of women? What are the specific research questions that emerge from the highly gendered patterns of labor and responsibility in all parts of the farm-to-plate value chain? And not insignificantly, how does this FP relate to FP4?

Whilst the overall budget seems reasonable, there appear to be clear opportunities to merge this FP with FP4 to achieve efficiency savings and to free up resources that could possibly be allocated to FP1.

Summary recommendations:

- Revisit ToC and impact pathways;
- Clarify research focus and agenda;
- Clarify networking and partnership strategy;
- Consider merger with FP4 – major rewrite required

6.4 Gender-equitable and resilient livelihoods [Score: C]

The ToC states that the FP research will inform a combination of shifts in policies, institutions and development practice that can lead to measurable increases in assets of poor households. It is hypothesized that this will in turn lead to measurable improvements in livelihood opportunities and increase resilience of communities and the systems they depend upon.

Whilst the proposed FP clearly has strategic relevance, its actual targets and ToC require better articulation. In addition, the FP needs to clarify in which specific ways the content of its research will differ from that in FP3? And why, given the powerful gender content of FP3, rather than merging, there is a need for an entirely separate gender flagship?

The information provided makes it difficult to assess what will actually be done in this FP, but the recent AAS review (CGIAR-IEA 2014) found the systems research and livelihoods approaches of AAS problematic. The pre-proposal should clearly identify how the proposed new directions overcome the shortcomings identified.

The ISPC notes that the FP has identified a space in which few other agencies are working. The challenge is to better define this research in a way that fits the CGIAR's agenda and comparative advantage, and to link local level partnership activity to groupings that have legitimacy and carriage for policy and institutional change at higher scales. Without such clarity, the FP's objectives will be difficult to achieve. In that respect, opportunities for collaboration with other CRPs -- and particularly with gender work across the CGIAR -- also need further exploration.

The FP contains a good discussion of gender, but other cross-cutting issues are mentioned without providing much detail. Major trade-off questions related to the resource and space demands of other sectors, urban encroachment, etc., need additional consideration.

Whilst the overall budget seems reasonable, there appear to be clear opportunities to merge this FP with FP3 to achieve efficiency savings and to free up resources that could be allocated to FP1.

Summary recommendations:

- Revisit ToC and impact pathways;
- Clarify research focus and agenda;
- Clarify networking and partnership strategy;
- Consider merger with FP3 – major rewrite required