



Independent  
Science for  
Development  
Council

Agenda Item 11  
Document SC17-11b  
For Background  
Issued: 19 October 2022



# Application of the Quality of Research for Development Framework to Initiative Reviews: Lessons Learned

14 October 2022

*Credit: CGIAR CIFOR Tri Saputro*

# Contents

|   |           |
|---|-----------|
| <b>Executive Summary</b> .....  | <b>1</b>  |
| <b>1 Background</b> .....   | <b>2</b>  |
| 1.1 Operationalization of QoR4D for Initiative External Reviews.....  | 3         |
| 1.1.1 Initiative Review Process and Reporting.....  | 3         |
| 1.1.2 Purpose of Lessons Learned .....  | 3         |
| <b>2 Review Assessment Feedback</b> .....   | <b>3</b>  |
| 2.1 Summary of Feedback .....   | 4         |
| <b>3 Initiative Design Team Responses to ISDC Reviews and Recommendations</b> .....   | <b>5</b>  |
| 3.1 Lessons Learned and Improvements for the Future.....  | 5         |
| 3.1.1 QoR4D and Its Application to Initiatives.....   | 5         |
| 3.1.2 Insights for the Design of the Initiative Proposal Template .....   | 6         |
| 3.1.3 Areas for deeper thinking by IDTs and Senior Leadership in Developing Future Initiatives ...                          | 7         |
| 3.1.4 Consultation and Partnerships .....   | 7         |
| 3.1.5 Comparative Advantage .....   | 7         |
| 3.1.6 Research Justification and Research Questions.....  | 8         |
| 3.1.7 Cohesion Across Initiatives .....   | 8         |
| <b>4 In Summary</b> .....   | <b>8</b>  |
| <b>Appendix 1: Questionnaire Guide for Initiative Review Lesson Consultations</b> .....                                     | <b>9</b>  |
| <b>Appendix 2: Summary of IDT Responses to ISDC Comments as Presented at System Council Meetings during June 2022</b> ..... | <b>10</b> |
| 4.1 Systems Transformation.....   | 10        |
| 4.1.1 Rethinking Food Markets and Value Chains for Inclusion and Sustainability.....  | 10        |
| 4.1.2 Digital Innovation and Transformation.....  | 10        |
| 4.1.3 Harnessing Gender and Social Equality for Resilience in Agrifood Systems .....  | 11        |
| 4.1.4 Foresight and Metrics.....  | 12        |
| 4.1.5 Transformational Agroecology across Food, Land and Water Systems .....  | 13        |
| 4.1.6 ClimBeR.....  | 13        |
| 4.1.7 Mitigate+: Research for Low Emission Food Systems .....   | 14        |
| 4.2 Resilient Agri-food Systems .....   | 14        |
| 4.2.1 Livestock, Climate and System Resilience .....  | 14        |
| 4.2.2 Sustainable Animal Productivity for Livelihoods, Nutrition and Gender inclusion (SAPLING) .....                       | 15        |
| 4.2.3 Protecting Human Health through a One Health Approach .....   | 15        |
| 4.2.4 Resilient Aquatic Food Systems for Healthy People and Planet.....   | 16        |
| 4.2.5 Excellence in Agronomy for Sustainable Intensification and Climate Adaptation .....                                   | 17        |
| 4.2.6 NATURE+: Nature-positive Solutions for Shifting Agrifood Systems to More Resilient and Sustainable Pathways .....     | 17        |
| 4.2.7 Resilient Cities Through Sustainable Urban and Peri-urban Agrifood Systems .....                                      | 18        |
| 4.2.8 Sustainable Intensification of Mixed Farming Systems .....  | 18        |
| 4.3 Genetic Innovation .....  | 18        |
| 4.3.1 Genebanks .....   | 18        |
| 4.3.2 Market Intelligence.....  | 19        |

|   |           |
|---|-----------|
| 4.3.3 Accelerated Breeding .....  | 20        |
| 4.3.4 Breeding Resources .....  | 20        |
| 4.3.5 Seed Equal .....  | 21        |
| 4.4 Regionally Integrated Initiatives .....   | 21        |
| 4.4.1 Driving Food Security, Inclusive Growth and Reducing Out Migration in Latin America and the Caribbean (LAC) ..... | 21        |
| 4.4.2 Ukama Ustawi (UU): Diversification for Resilient Agrifood Systems in East and Southern Africa (ESA) .....         | 22        |
| 4.4.3 From Fragility to Resilience in Central and West Asia and North Africa (F2R-CWANA) .....                          | 22        |
| 4.4.4 Transforming Agri-Food Systems in West and Central Africa (TAFS-WCA) .....  | 23        |
| 4.4.5 Transforming Agrifood Systems in South Asia (TAFSSA) .....  | 23        |
| 4.4.6 Securing the Food Systems of Asian Mega-Deltas for Climate and Livelihood Resilience ....                         | 23        |
| <b>5 References .....</b>   | <b>25</b> |

### **About the Independent Science for Development Council**

The Independent Science for Development Council (ISDC) is a standing panel of impartial, world-class scientific experts who provide rigorous, independent strategic advice to the CGIAR System Council and other stakeholders. Membership was established in October 2019 and 2022 membership consisted of Holger Meinke (chair), Nompumelelo H. Obokoh (vice chair), Fetien Abay Abera, Andrew Ash, Chris Barrett, Magali Garcia, Suneetha Kadiyala, and Lesley Torrance. In order to operate, ISDC receives operational support from its secretariat, which is part of CGIAR’s Independent Advisory and Evaluation Service (IAES) and hosted at the Rome, Italy, office of the Alliance of Bioversity International and the International Tropical Agricultural Research Center.

### **Acknowledgments**

This report draws on a survey of external subject matter experts and consultations with CGIAR leaders involved in the Initiative proposals. The input from these stakeholders supported the recommendations in this report. ISDC expresses gratitude to ISDC workstream lead Andrew Ash and chair Holger Meinke for their leadership and guidance throughout this project. Appreciation also goes to Secretariat lead Amy R. Beaudreault.

### **Citation**

ISDC. 2022. *Application of the Quality of Research for Development framework to Initiative reviews: Lessons learned*. Rome: Independent Advisory and Evaluation Service.

## Executive Summary

To improve future ISDC external review of CGIAR proposals, ISDC conducted an *ex-post* analysis of the Initiative review process through a reviewer survey, CGIAR stakeholder consultations, examination of QoR4D reviewer scoring divergence, and Initiative Design Team (IDT) responses to ISDC reviews. The report details the analysis' recommendations grouped by: (1) QoR4D and its application to Initiatives, (2) insights for the design of the Initiative proposal template, and (3) areas for deeper consideration by IDTs and senior leadership in developing future proposals.

- For QoR4D and its future application, the 17 review criteria will be revised to improve clarity and remove any redundancy. ISDC designed the criteria to apply to Global Thematic and Regional Integrated Initiatives and learned through this analysis they were less well aligned to Initiatives that were service oriented or focused on underpinning technologies (e.g., Genebanks).<sup>1</sup> In future, the 17 criteria will be modified so they also will be suitable for the assessment of proposals involving different goals. The QoR4D criteria have been revised to explicitly ensure research hypotheses, comparative advantage, and inclusive innovation prompt well considered responses by IDTs.
- For the Initiative proposal templates designed by CGIAR System Office, recommendations included adding a two-page summary that permits proponents to articulate the value proposition, approach, and projected impact in a more persuasive, narrative form. Reorganization of templates for a better "flow" with sufficient space to provide important process detail that currently is only located in appendix sections. Although the goal of keeping proposals short continues to be recommended, the right balance still needs to be continuously reviewed.
- To improve the development of future Initiatives, the analysis recommends that IDTs and senior leadership emphasize consultation and partnerships, comparative advantage, research justification and research questions, as well as the overall cohesion across the portfolio.

The consultations confirmed that the QoR4D criteria and the process used for the ISDC Initiative reviews were beneficial to System Council and assisted in its decision making. The lessons provided in this *ex-post* analysis will further improve Initiative review processes for independent assessments and will have implications if ISDC participates in future stage-gating of current Initiatives.

---

<sup>1</sup> Initiatives may include the term platforms but does not include the proposed five Impact Area Platforms.

# 1 Background

The Quality of Research for Development in the CGIAR Context (Qo4RD [ISDC, 2020]) is a framework that facilitated CGIAR System-wide agreement on the nature and assessment of the quality of science, a concept broadened beyond scientific credibility to include the likelihood of achieving development outcomes. QoR4D was initially developed in 2017, adopted in 2018, and revised in 2020. The framework was designed to help CGIAR to:

- Develop research strategies and programs
- Build a new research portfolio
- Establish monitoring systems
- Design performance management standards

QoR4D was established through a consultative process involving representatives from entities across CGIAR involved in managing or assessing science quality. Through the consultative process, the Independent Science for Development Council (ISDC) developed four elements (table 1) that form the basis for a common frame of reference across CGIAR.

Table 1: QoR4D Four Elements

| QoR4D Element                 | Description   |
|-------------------------------|---|
| <b>Relevance</b>              | Relevance refers to the importance, significance, and usefulness of the research objectives, processes, and findings to the problem context and to society, taking into account CGIAR's comparative advantage. It incorporates strategic stakeholder engagement along the agricultural research for development (AR4D) continuum, original and socially relevant research aligned to national and regional priorities, the CGIAR Strategy and Results Framework (SRF), and the Sustainable Development Goals (SDGs). It also recognizes the importance of international public goods. |
| <b>Scientific Credibility</b> | Scientific credibility requires that research findings be robust and that sources of knowledge be dependable and sound. It includes a clear demonstration that data used are accurate, that the methods used to procure the data are fit for purpose, and that findings are clearly presented and logically interpreted. It recognizes the importance of good scientific practice, such as peer review  |
| <b>Legitimacy</b>             | Legitimacy means that the research process is fair and ethical and perceived as such. This feature encompasses the ethical and fair representation of all involved (e.g., funders, research teams, collaborators, policy makers, farmers) and consideration of the interests and perspectives of intended users. It requires transparency, sound management of potential conflicts of interest, recognition of the responsibilities that go with public funding, genuine involvement of partners in co-design, and recognition of partners' contributions.                            |
| <b>Effectiveness</b>          | Effectiveness means that research generates knowledge, products, and services that lead to innovations and provide solutions. It implies that research is designed, implemented, and positioned for use within a dynamic theory of change, with appropriate leadership, capacity development, research skills, and a supportive, enabling environment to translate knowledge into action and to help generate desired outcomes.   |

## 1.1 Operationalization of QoR4D for Initiative External Reviews

The next stage started in 2021 when ISDC operationalized QoR4D to make the framework fit for purpose for Initiative proposal reviews—a major step in the One CGIAR reform that put in practice the 2030 Research and Innovation Strategy (CGIAR, 2020). With the commencement of One CGIAR, 33 Initiatives would replace the CGIAR Research Platforms (CRPs). As part of its mandate, ISDC provides science advice to System Council (i.e., funders of CGIAR), which includes the external review of scientific proposals.

The ISDC external review did not prioritize Initiative proposals but served as quality assurance, an essential part of good governance. The main benefit was assurance that the best possible science is conducted to deliver the intended development outcomes. This assurance provided confidence to funders that their investments in One CGIAR research are appropriately targeted with high chances for success.

The operationalization of QoR4D defined 17 criteria that encompassed the four underpinning elements of QoR4D, aligned with the Eschborn Principles (ISDC, 2021). Criteria were framed through a codesign engagement to ensure Initiative developers put an inquiry into understanding the context, anticipating needs of end-users and opportunities that might emerge, and building a package of partnerships and activities required to reach high-level outcomes and impacts. Criteria were designed as a means of providing feedback for improving individual proposals and their implementation, and to provide advice to System Council.

### 1.1.1 Initiative Review Process and Reporting

An independent and anonymous review team reviewed each Initiative, comprised of three external subject matter experts (SMEs), led by an ISDC member and supported by the CGIAR Independent Advisory and Evaluation Service (IAES). The CAS Secretariat identified SMEs through a competitive roster enrollment that currently contains more than 100 social and biophysical scientists representing more than 25 countries. Although the reviews were anonymous, an aggregated list of reviewers for each Initiative proposal wave was presented along with select demographic data (IAES, 2022).

SMEs were matched based on their expertise to each Initiative review team, with one serving as a coordinator who aggregated and coordinated the review, working closely with the ISDC member lead. Because the Initiatives are multidisciplinary and cut across all five CGIAR Impact Areas, each SME team had a social scientist to ensure perspective diversity. Reviewers attended a workshop in prior to the reviews where the CAS Secretariat will provide detailed guidance on the expectations and process.

Criteria were designed as a means of delivering feedback for improving individual proposals and their implementation, and to provide advice to System Council. Two templates were developed: 1) for the review teams and 2) for final reporting. Review teams assessed by a combination of qualitative data and Likert scores per criterion. Scores were not weighted since each proposal was unique.

The external reviewers scored each of the 17 QoR4D criteria on a four-point Likert scale (criteria mapped against the current proposal template). The external reviewers also had an opportunity to provide short narratives for each of the criteria, an overall assessment of the proposal, and two proposal sections of greatest strengths and weaknesses. The three external templates developed by the SMEs then were aggregated to generate the final summary and report for System Council. The 33 Initiative reviews occurred in two waves, resulting in two reports. This report does not include data from the two Initiatives reviewed after March 2022 that included Genome Editing and Fragility, Conflict, and Migration.

### 1.1.2 Purpose of Lessons Learned

Since ISDC will continue to review scientific proposals as part of its mandate, this report provides an ex-post summative assessment of the QoR4D criteria along with other feedback received for the Initiative proposal development process. The recommendations will impact future ISDC proposal and stage-gating external reviews.

## 2 Review Assessment Feedback

Over four months, ISDC collected qualitative and quantitative feedback to inform its lessons learned. The first data collection occurred at the conclusion of the Initiative reviews. The ISDC secretariat within IAES disseminated an online 28-item questionnaire to all SMEs who served as reviewers (N = 53; n = 34; 64% response rate). The survey was organized by three domains including reviewer and coordinator templates, QoR4D criteria scoring, and overall questions and demographics.

To gain internal CGIAR perceptions once feedback from the SMEs was obtained, ISDC held consultations with internal leadership and scientists. Four consultations were held with the director of programs, three global science directors, the managing director, research delivery and impact, and three Initiative proposal leads from the Initiative Design Teams (IDTs). A questionnaire guide was developed to lead discussions (Appendix 1).

Over four months, ISDC collected qualitative and quantitative feedback to inform its lessons learned. The first data collection occurred at the conclusion of the Initiative reviews. The ISDC Secretariat within the Independent Advisory and Evaluation Function (IAES) disseminated an online 28-item questionnaire to all SMEs who served as reviewers (N = 53; n = 34; 64% response rate). The survey was organized by three domains including reviewer and coordinator templates, QoR4D criteria scoring, and overall questions and demographics.

To gain internal CGIAR perceptions once feedback from the SMEs was obtained, ISDC held consultations with internal leadership and scientists. Four consultations were held with the director of programs, three global science directors, the managing director, research delivery and impact, and three Initiative proposal leads from the Initiative Design Teams (IDTs). A questionnaire guide was developed to lead discussions (Appendix 1).

## 2.1 Summary of Feedback

SMEs perceived the reviewer and coordinator templates as fit for purpose. Related to QoR4D criteria scoring, 94% agreed that a Likert scale was appropriate and 79% agreed that a four-point scale provided enough granularity. However, some SMEs would have preferred less restricted word limits for rationales and commentary.

Some reviews had high variance within QoR4D criteria and 64% of SMEs responded that the variance was caused by reviewer expertise diversity (figure 1). Although reviewer expertise diversity caused variance in scoring, the majority of SMEs found this diversity as a strength of the process. One reviewer noted that a strength was, “the diversity of views and experience; especially bringing in more practical and grounded views to the process.”

SMEs suggested areas for improvement included lack of time and some of the criteria overlapped. The majority of weaknesses in the proposal process were not within ISDC’s control regarding restrictions in the proposal template, access to appendices, and a lack of science. One reviewer commented, “there was much focus on the theory of change, but little on the process of practically converting research results into impact at scale.”

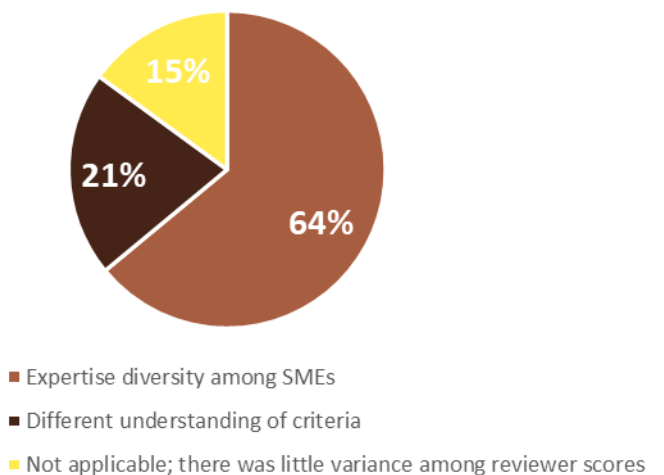
The internal CGIAR consultations had similar findings. Science leaders perceived the coordinator template and ISDC reporting as useful and appropriate given the primary audience of System Council. The reporting of all scores and the consensus score was appreciated along with the rationale supporting the scores. However, an aspect noted was that the QoR4D criteria was developed for scientific proposals and some criteria did not fit for proposals that were more structural or service oriented, such as platforms. The IDTs found the linkages of QoR4D criteria to proposal sections valuable.

Like the SMEs, discussions included areas of improvement that were not in ISDC’s control such as proposal template design, lack of time for proposal development, and rollout of reviews. One comment made was “the current Initiative proposal rollout was chaos.” The consultations also uncovered lack of clarity about what happens after the ISDC review.

The most mentioned area for improvement from the SME survey and CGIAR consultations focused on the proposal template. Some remarks included the following.

- The innovation mapping request of the proposal was extremely time consuming.
- The template space was too limited. Proposal writers did not have enough space to adequately address the QoR4D criteria.
- The proposal template was too development focused and prescriptive.

Figure 1: Agreement of QoR4D Criteria Variance Caused by Reviewer Expertise



## 3 Initiative Design Team Responses to ISDC Reviews and Recommendations

The process for how IDTs responded to the ISDC reviews and recommendations varies considerably across CGIAR. Initiatives are at different stages of design and implementation, and this has been one factor in how they are incorporating ISDC feedback.

During May and June, the System Office held a series of drop-in virtual meetings for System Council members to learn more about the Initiatives' design and implementation. At the time of this publication, 26 Initiatives provided explicit responses to ISDC recommendations, indicating that the ISDC reviews were having significant influence. Many Initiatives provided quite detailed responses on how they were revising their design and implementation based on the feedback. This suggests that the review criteria and the mode reviewers provided feedback was useful and constructive for many Initiatives. As might be expected, a few Initiatives expressed some defensiveness in responses, mostly through a lens that the Initiative template did not permit them to fully articulate critical aspects of the Initiative to which the ISDC comments were directed. Appendix 2 provides a synthesis of the responses to ISDC reviews and recommendations as presented at the May-June System Council drop-in meetings.

The assessment or audit of how well IDTs responded to the ISDC Reviews and how recommendations were incorporated into revised Initiative designs and implementation is not part of ISDC's remit. However, a defined process by the System Office is important as consultations on the ISDC review process revealed confusion within IDTs and senior leadership.

### 3.1 Lessons Learned and Improvements for the Future

#### 3.1.1 QoR4D and Its Application to Initiatives

**Were the criteria appropriate and did they prompt the required constructive critique from reviewers?**

Based on the surveys and interviews, the QoR4D criteria are highly relevant and appropriate for reviewing Initiatives. Some of the criteria were considered to overlap in scope, which made scoring confusing for a few reviewers. For future Initiative reviews, the criteria will be revised to improve clarity and remove any overlap. This will be completed in tandem with finalization of the proposal template developed by the System Office.

ISDC designed the criteria to apply to research Initiatives and were less well aligned to Initiatives that were service oriented or focused on underpinning technologies (e.g., Genebanks).<sup>2</sup> In future, the 17 criteria will be modified so they also will be suitable for the assessment of proposals involving different goals to ensure they are fit for purpose.

The QoR4D criteria included aspects of innovation and comparative advantage. However, these were not strongly articulated or explicit enough to draw out responses with a depth of analysis or rigor. The criterion relating to research questions did not sufficiently draw out in the Initiative proposals the knowledge gaps being addressed or the underpinning research hypotheses. The QoR4D criteria have been revised to ensure research questions and underlying hypotheses, comparative advantage, and inclusive innovation prompt well considered responses by IDTs.

**What criteria produced most consistency in scoring and what produced most divergence and understanding reasons why?**

ISDC analyzed the individual reviewer scores to determine which criteria generated most divergence amongst reviewers (table 2). Unsurprisingly, the costing criterion generated most variation in scoring. This relates to the template which requested from IDTs a high-level budget summary with little detail relating to work packages or outputs. Many reviewers assessed this budget information to be inadequate for proposals requesting more than USD \$30 M.

Other areas that generated most divergence amongst reviewers were theory of change, analysis of trade-offs and synergies, impact at scale, and capacity building. In contrast, there was a more consistent assessment across reviewers for the "bread and butter" aspects of research (i.e., defining the research problem, alignment of objectives, outputs and outcomes, work packages, research methodology, research outputs, project management). The lower mean scores and bigger variation amongst reviewers

<sup>2</sup> Initiatives may include the term platforms but does not include the proposed five Impact Area Platforms.



in scoring criteria relating to impact, capacity building and trade-offs suggests Initiatives were less well able to persuasively communicate their value proposition in these emergent but critical areas of CGIAR research.

Table 2. Mean Scores (0-3 scoring range) for Each of the QoR4D Criteria Across 31 Initiatives

| QoR4D Criteria   | Mean Score | Std Dev |
|--|------------|---------|
| Clearly defined research problem                                 | 2.4        | 0.5     |
| Initiative is demand driven through codesign                     | 2.3        | 0.6     |
| Research questions/objectives/outputs/outcomes aligned           | 2.2        | 0.5     |
| Overall Theory of Change   | 2.2        | 0.7     |
| Work package Theory of Changes – average                         | 2.3        | 0.4     |
| Research methodology   | 2.2        | 0.5     |
| Analysis of trade-offs and synergies                             | 2.2        | 0.7     |
| Evidence that the Initiative will likely lead to impact at scale | 2.3        | 0.7     |
| Research/implementation demonstrates gender and social inclusion | 2.4        | 0.6     |
| Risk framework   | 2.4        | 0.6     |
| CGIAR capacity and its comparative advantage                     | 2.4        | 0.6     |
| Capacity building  | 2.2        | 0.7     |
| Project management mechanisms                                    | 2.4        | 0.5     |
| Justified and transparent costing                                | 1.9        | 0.9     |
| Anticipated research outputs; protocols for open-data & -access  | 2.5        | 0.5     |
| Monitoring, evaluation & learning (MEL)                          | 2.4        | 0.5     |
| Evaluation & impact assessment                                   | 2.4        | 0.6     |

\* The standard deviation is the mean of each Initiative score standard deviation based on three reviewers per Initiative.

### 3.1.2 Insights for the Design of the Initiative Proposal Template

**At a broader level are the four elements still appropriate (e.g., with a stronger focus on innovation systems should this come out more explicitly in the elements)?**

Many of the questionnaire comments and post-review interviews raised issues with the Initiative template rather than the review criteria or process. These comments came from reviewers, IDTs and Global Science Leaders and have been summarized on p. 4.

A common thread through these comments was the template was too prescriptive and did not offer the opportunity to provide a narrative of the value proposition. Although proposals were mostly more than 50 pages, the individual proposal sections did not individually provide enough space to go into sufficient detail. This resulted in proposals that were still long but ironically didn't provide enough information. For example, the sum of the parts did not add up to a cohesive document. This might be addressed by:

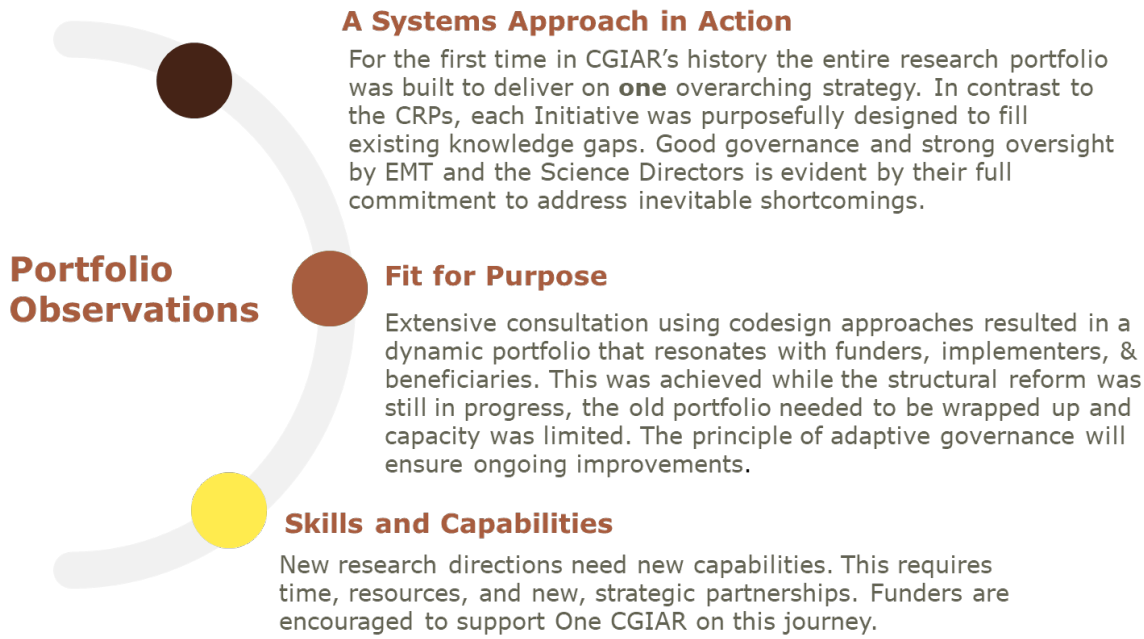
- providing a two-page Summary section at the front that permits the value proposition, approach, and projected impact to be articulated in a more persuasive narrative form,
- re-designing sections so that there is more of a flow and that sufficient space is provided in critical areas and other areas of more specific process detail located in appendix sections.

Codesign, partnerships, and inclusive innovation are all critical areas for the design of a successful Initiative that has the best chance of creating impact. These areas cut across the critical QoR4D element of Legitimacy and within that the area of ethics. Ethics was reduced in the template to a default section of text and this needs to be addressed in subsequent templates.

### 3.1.3 Areas for deeper thinking by IDTs and Senior Leadership in Developing Future Initiatives

The Initiative Reviews, survey results, and consultations with CGIAR leadership provided some high-level insights that should be considered in the development of future Initiative proposals. Figure 2 provides the feedback communicated to SC members on the cohesiveness of the research portfolio, presented at the 14<sup>th</sup> Meeting of System Council, March 2022.

Figure 2: Observations Across Research Portfolio



In addition to previous SC advice, the following provides additional lessons from the 31 reviews.

#### 3.1.4 Consultation and Partnerships

Clearly from the 31 Initiatives reviewed there was extensive consultation on the research problem and needs. This occurred in the context of a structural reform process still underway, the ongoing portfolio that needed to be concluded, and the COVID-19 pandemic, which restricted travel and face-to-face engagement.

Consequently, the nature of partnerships was not sufficiently detailed, and it was difficult to determine from the Initiatives if collaborators were deeply involved in codesign and project teams nor how these partnerships will be leveraged. Without having a solid understanding of these partnerships, assessment of their appropriateness proved difficult for some reviewers. Future Initiative proposals need to better articulate the depth of these partnerships, particularly in the context of how they contribute to research outputs and their role in facilitating scaling of impact.

#### 3.1.5 Comparative Advantage

The term "comparative advantage" was used in quite varied ways within CGIAR Initiatives. Most commonly, Initiative proposals used the term to describe the stock of available research inputs. For example, a critical mass and mix of research scientists with appropriate skills, especially in the context of multi-disciplinary teams, location, and geographic spread of operations, CGIAR as an honest broker, ability to partner and leverage scaling partners, long track record of research, ability, and reputation. Initiative proposals rarely used the concept to refer to CGIAR research outputs, outcomes, or impacts, although that is its proper application.

That is a missed opportunity within the Initiative proposals to demonstrate wise stewardship of scarce investor and partner resources to maximize total impact. Taking a more thoughtful approach to assessing CGIAR's comparative advantage can strengthen portfolio management and expected CGIAR research impacts. The upcoming ISDC Technical Note on comparative advantage will provide a framework that should be embedded in future Initiatives.

### **3.1.6 Research Justification and Research Questions**

Many Initiative proposals were lacking in solid scientific justifications outlining why the research is needed. The proposals continued to have a strong development and impact emphasis, and with tight word limits, attentiveness to some of the underpinning best practice in presenting scientific research appears to have been sacrificed. Future Initiatives should identify knowledge gaps that inhibit development followed by the research questions and their underlying hypotheses. Along with the balance of science and development in the Initiatives, is the concern that many proposals present overall vague and poorly defined research questions. Some of the issues in clearly articulating research justification and questions relate to the template design itself but even within those constraints, a more persuasive articulation is required.

### **3.1.7 Cohesion Across Initiatives**

For the first time in CGIAR's history the entire research portfolio was built to deliver one overarching strategy with each Initiative purposefully designed to fill existing knowledge gaps. However, despite the intent towards a unified research strategy, some Initiatives identified divergent drivers and proposed contradictory solutions. This was particularly evident in the Regional Integrated Initiative proposals, which did not always link well with other Initiatives leading to gaps or duplication of effort. These gaps and duplications could lead to counterproductive intra-CGIAR competition between global and regional Initiatives.

In future, sufficient time should be provided for Science Groups and IDTs to look across the portfolio to identify any contradiction and duplications and resolve these during the design process. This cross-portfolio assessment would also provide a better opportunity to identify synergies that can be reflected in the individual Initiative designs.

## **4 In Summary**

The QoR4D criteria and method for the ISDC Initiatives and advice proved to be beneficial to System Council, along with IDTs. The lessons provided in this *ex-post* analysis will further improve Initiative review processes for independent assessments and may have implications if ISDC participates in future stage-gating of current Initiatives. The learning from this process could be beneficial for other agriculture research for development organizations that need to review diverse research proposals in a transparent and strategic manner. During a time of organizational reform, adaptive management and continued self-assessments are required to ensure future efficient and effective proposal reviews.

# Appendix 1: Questionnaire Guide for Initiative Review Lesson Consultations

## QoR4D Criteria

1. Overall, what are your thoughts on the QoR4D criteria?
2. Is a stronger focus on innovation in the QoR4D elements of effectiveness, legitimacy, scientific credibility, and relevance needed?
3. Was a 4-point Likert scale appropriate for the QoR4D elements? If not, what are suggestions to improve?
4. In relation to the ISDC external review, what changes should be made to the proposal template?

## Review Design

5. Tell us your thoughts on the external review process. What was its greatest strength and weakness?
6. Was the design of three external reviewers with one ISDC member as lead appropriate?
7. Was the diversity of the SMEs viewed as positive?

## Review Template & Reporting

8. What are your thoughts on the design of the report?
9. Did the executive summary serve its intent of a high-level summary of the proposals?
10. Looking at the individual Initiative reporting, how was the level of detail (too much, too little, etc.)?
11. Any recommendations on how to improve reporting?

## Remaining Input

12. Is there anything else you would like to add?

# Appendix 2: Summary of IDT Responses to ISDC Comments as Presented at System Council Meetings during June 2022

## 4.1 Systems Transformation

### 4.1.1 *Rethinking Food Markets and Value Chains for Inclusion and Sustainability*

| ISDC Recommendation  | Response   |
|--|--|
| Three years is too short for meaningful impact at scale of such interventions  | <ul style="list-style-type: none"> <li>Outcome statements revised to clarify three-year outcomes (at pilot level) and expected impacts by 2030 (after scaling)</li> </ul>  |
| The specific challenges of reaching women should be addressed in greater depth   | <ul style="list-style-type: none"> <li>Initiative concept note and operational workplans now address more explicitly how women and youth are being targeted in the design phase, giving due consideration to constraints and tradeoffs.</li> </ul> |
| Define more specific and relevant impact indicators  | <ul style="list-style-type: none"> <li>Impact indicators follow closely those of the One CGIAR Impact Areas. Refined metrics have been introduced as part of the Initiative's M&amp;E framework</li> </ul>   |
| Clarifying hypotheses on market structure, (speed of) adoption or adaptation of technologies, ability to reach women ... and environmental impacts, would help strengthen the risk framework | <ul style="list-style-type: none"> <li>Analysis of existing market structures and incentives for adoption will be part of scoping assessments for intervention design and scaling-readiness assessments.</li> </ul>                                |
| Include postharvest scientists, agronomists, and/or food scientists in the core team   | <ul style="list-style-type: none"> <li>These have been included (from CGIAR and partnership with WUR)</li> </ul>   |

### 4.1.2 *Digital Innovation and Transformation*

| ISDC Recommendation   | Response   |
|---|--|
| Clearly define "digital technologies."  | <ul style="list-style-type: none"> <li>We recognize that digital innovations in themselves are not solutions. We will clarify different approaches to achieve the goal by selectively using more specific terms that can convey our intent better within the context of each Work Package.</li> </ul>  |
| Couple technologies with science and extension and improve linkages with CGIAR Impact Areas | <ul style="list-style-type: none"> <li>To improve the linkage with CGIAR Impact Areas, we designed Initiative Projects that are mapped to five Impact Areas. Collectively, these projects will demonstrate how we deliver benefits toward impacts to different systems and contribute toward the Impact Area outcomes.</li> <li>Our Theory of Change assumes that the digital ecosystem develops as technologies benefit the most vulnerable without increasing the digital divide. To be more specific, we designed 17+ Initiative Projects that address system-level problems using a diverse set of innovative digital tools and approaches.</li> </ul> |
| Be more specific about the design of Work Packages.   |  |
| Iteratively refine innovations.   | <ul style="list-style-type: none"> <li>Applying the human-centered design approach, our work will initiate through engagement with partners and stakeholders and iterate. We will use the forums to keep checking back with partners and stakeholders to co-design prototypes and implement them. This will</li> </ul>   |

| ISDC Recommendation   | Response   |
|---|--|
| Targets of gender diversity, inclusivity, and equity may not be achievable.   | <p>ensure uptake and impact</p> <ul style="list-style-type: none"> <li>In partnership with CGIAR Digital Services, we will employ the Lifecycle Approach that will iteratively design prototype solutions, and deliver them to partners for evaluation, and redesign.</li> <li>We revised MELIA metrics to be grounded on the latest baseline data and reflect a coherent GESI focus.</li> <li>We will iteratively co-design and co-develop prototypes, evaluate, and redesign digital innovations throughout the life of our Initiative.</li> <li>Beyond Work Package 2, our design of innovations will focus on the wider issues of inclusivity relating to youth and marginalized sectors of society, prioritizing simpler, localized solutions with low entry barriers.</li> </ul> |
| Budget assumptions and justification are missing.                             | <ul style="list-style-type: none"> <li>We did submit the budget narrative as a separate document following the submission guideline, but we found that it was not delivered to the reviewers.</li> <li>We have added a cost-benefit analyst to the team, who will lead a series of cost-benefit analyses on the Initiative Projects. We will also explore the well-being of society and the environment as given by the five Impact Areas.</li> </ul>  |
| Outline processes for ensuring the legacy of tools after the Initiative ends. | <ul style="list-style-type: none"> <li>We will support demand partners to enhance their existing services and develop a research-based sustainable business model. For public sector partners, our capacity-strengthening programs will support embedding the tools institutionally.</li> <li>We are partnering with CGIAR Digital Services to scope on the provision of infrastructure to centrally serve some of the services that are required by multiple Initiatives/partners.</li> </ul>   |
| Address challenges of attributing the Initiative's impact.                    | <ul style="list-style-type: none"> <li>We will reflect on the challenge in the design of our causal impact assessments, employing "best practices" from the digital development communities.</li> <li>We will engage with SPIA to explore innovative impact assessment approaches suitable for digital innovations whilst adhering to ethical considerations.</li> </ul>   |

#### 4.1.3 Harnessing Gender and Social Equality for Resilience in Agrifood Systems

| ISDC Recommendation   | Response   |
|---|--|
| Local buy-in and partnerships will be crucial   | <ul style="list-style-type: none"> <li>Maintaining a dialogue with local partners</li> </ul>   |
| Strengthen the Theory of Change, including on policy or normative pathways to change and hurdles to scaling   | <ul style="list-style-type: none"> <li>HER+ meets July 12-13 to integrate feedback into TOC and WPs</li> </ul>   |
| Diversity in target countries means heterogeneity in challenges, responses  | <ul style="list-style-type: none"> <li>Evidence will carefully explain the role of context; lessons will focus on cross-country and cross-WP synthesis</li> </ul>  |
| Consider methods needed to measure attitudinal changes  | <ul style="list-style-type: none"> <li>This will be a key focus of studies with new data collection</li> </ul>   |
| Strengthen plans for capacity building  | <ul style="list-style-type: none"> <li>Working on a capacity building strategy and will work in collaboration with the Gender Platform</li> </ul>  |
| The gender transformative work is ambitious but then narrowed down to "norms that block women's access to financial services and entrepreneurship opportunities." Is this the plan? | <ul style="list-style-type: none"> <li>Work Package 1 will identify leverage points and levers (GTAs) to intervene in the AFS that build women's economic resilience to climate change: could be financial, entrepreneurship, social networks, nutrition.</li> </ul> |

| ISDC Recommendation   | Response   |
|---|--|
| <p>This Work Package (should) dig into specific constraints that impact women's uptake of technology ...not always addressed under norms but deeply influenced by them: ...a concern here is the diversity of women's initial conditions.</p> | <ul style="list-style-type: none"> <li>• A systematic review will be conducted, supplemented by primary data collected in the living labs. Understanding the diversity of women's initial conditions will be the basis for designing STIBs. We will focus on the most vulnerable groups to illustrate this process and assess outcomes.</li> </ul> |
| <p>The overall proposition relies on successfully...designing social protection programs with complementary program components in the priority countries. There is no assessment of the status of these approaches.</p>                       | <ul style="list-style-type: none"> <li>• In "Pathway 1," case studies on impact of SP on women's resilience to climate shocks build on large-scale SP programs on which we have detailed data and relationships with relevant partners.</li> <li>• In "Pathway 2," we have added an activity for two target countries in 2022-2023.</li> </ul>     |
| <p>There should be some in-person, tailored support for outputs 4.1 (toolkit) and 4.5 (guide) to ensure that people understand a) how they are relevant for their specific work, and b) how to use them.</p>                                  | <ul style="list-style-type: none"> <li>• We now plan 20-25 interviews with expected users of these tools at the tool design stage, to ensure that the tools address their needs and to increase their subsequent take-up.</li> </ul>   |
| <p>The body of work that will address the governance and policy challenges is not articulated with the necessary clarity for pathways 1 and 2 in Work Package 4.</p>  | <ul style="list-style-type: none"> <li>• We are now developing a formal conceptual framework. This will guide thinking about how pathways 1 and 2 operate and where the levers are for expanding women's voice and agency.</li> </ul>  |

#### 4.1.4 Foresight and Metrics

| ISDC Recommendation  | Response  |
|--|---|
| <p>The approach may hew too closely to work with IMPACT and RIAPA, and thus focus too much on the agriculture sector.</p>  | <ul style="list-style-type: none"> <li>• We agree that it is essential to analyze other sectors in addition to agriculture. Our approach includes both sector-specific (partial equilibrium) and economy-wide (general equilibrium) modeling tools. RIAPA, for instance, captures the entire agri-food system and economy and tracks individuals and households.</li> <li>• We will also link to other non-agricultural models, including water, transport, and energy systems models.</li> </ul>   |
| <p>More clarity is needed regarding metrics, identification of policies and investments to be analyzed, relationships to other CGIAR research, and other elements.</p> | <ul style="list-style-type: none"> <li>• We regret that these points were not sufficiently clear in the proposal. F&amp;M will focus on crosscutting systems-level outcome metrics (e.g., jobs, water use, and emissions in the food system) and household-level health/nutrition and gender/inclusion metrics, allowing F&amp;M to explicitly address trade-offs across all outcome areas. Key policies being targeted in F&amp;M will be defined with partners, including national and agricultural development/investment plans. F&amp;M is closely interacting with other CGIAR Initiatives.</li> </ul> |
| <p>The personnel list appears overly oriented towards biophysical and technological components compared to social science.</p>   | <ul style="list-style-type: none"> <li>• We agree that social sciences are critical, and regret that this was not sufficiently clear in the proposal. The staffing plan subsequently prepared for (and approved by) One CGIAR Senior Management makes clear the importance of social science expertise that will be brought to bear in the initiative.</li> </ul>   |

#### 4.1.5 Transformational Agroecology across Food, Land and Water Systems

| ISDC Recommendation  | Response  |
|--|---|
| No real co-construction process  | <p>Design phase:</p> <ul style="list-style-type: none"> <li>• AE-I consultation process conducted in each country to validate the demand and interests of national and local actors</li> <li>• Semi-structured interviews, meetings and local consultations also informed decision making</li> </ul> <p>Implementation:</p> <ul style="list-style-type: none"> <li>• Guiding principles developed (WP1) for “engaging with both national and local stakeholders”</li> <li>• Establishment of living labs in each country very consultative – national and local workshops</li> <li>• Demand for an agroecological transition revalidated during establishment of living labs</li> </ul>   |
| The [AE-I] consortium lacks knowledge and expertise on agroecology                           | <p>Not insignificant experience but fully accept the need for greater integration and strengthening of these capacities in CGIAR. To this end:</p> <ul style="list-style-type: none"> <li>• Recognize that opportunity for Capacity Development comes from implementing the initiative.</li> <li>• Capacity of at least 101 CGIAR scientists will be increased directly through input to the AE-I.</li> <li>• Transfer of knowledge from those partners with more experience to those with less (e.g. proposed formal training of WP leads and country coordinators on sustainability thinking in communities)</li> <li>• Allocate 2023 budget for development of CGIAR early career and senior researchers <u>as well as partners</u></li> </ul> |
| Overlap and lack of coherence between the approaches followed by the different work packages | <ul style="list-style-type: none"> <li>• Considerable effort by WP leads and living lab coordinators to design an integrated work program that ensures all WPs are implemented in specific contexts as a coherent program</li> <li>• Considerable effort in each ALL to develop bottom up, co-constructed interventions that address stakeholder priorities.</li> <li>• AE-I will establish national project boards/technical steering committees, involving the implementing partners and other key actors and stakeholders as recommended</li> <li>• ToC will be reviewed every year as part of a “pause &amp; reflection” exercise, before annual reporting</li> </ul>   |

#### 4.1.6 ClimBeR

| ISDC Recommendation                         | Response  |
|---|---|
| Embracing local partnerships                | <ul style="list-style-type: none"> <li>• ClimBeR is hosting national inception workshops in each focal country to solidify relationships with local partners, and co-design and validate work plans.</li> <li>• ClimBeR’s Partnership Strategy is based on the CGIAR Engagement Framework for Partnerships &amp; Advocacy that supports the identification of strategic local partners and establishes coordination roles and responsibilities for engaging with them.</li> </ul> |
| Vulnerability mapping and farmer typologies | <ul style="list-style-type: none"> <li>• ClimBeR and ILRI scientists have initiated a vulnerability and farmer typology exercise with initial results by the end of Q3 2022.</li> </ul>   |
| Coordinating and capturing synergies        | <ul style="list-style-type: none"> <li>• ClimBeR and LCSR will co-host a meeting with climate-focused CGIAR initiatives and bilateral projects in Kenya on June 20 and Senegal on July 18 to develop a strategy for operationalizing synergies in these countries.</li> </ul>   |



| ISDC Recommendation                         | Response  |
|---|---|
|   | <ul style="list-style-type: none"> <li>• ClimBeR's team environment facilitates coordination and synergies through biweekly meetings by country with all relevant work packages to coordinate activities, as well as one already-recruited staff responsible for facilitating and operationalizing synergies among Work Packages and CGIAR Initiatives.</li> </ul>  |
| Gender and social equity, emphasizing youth | <ul style="list-style-type: none"> <li>• Draft framework for gender and social equity, including youth, in climate resilient agriculture based on inputs from experts (within and outside the CGIAR) in transformative gender research and comments from donors such as GiZ.</li> <li>• Currently recruiting a post-doc through the Nordic Africa Institute to work with Work Package leads and partners to embrace social equity.</li> </ul> |

#### 4.1.7 Mitigate+: Research for Low Emission Food Systems

| ISDC Recommendation                                     | Response   |
|---|--|
| More consideration of benefits other than GHG reduction | <ul style="list-style-type: none"> <li>• Mitigation focus stems from M+ role in portfolio</li> <li>• Low emission food systems development in a manner that does not threaten food production</li> <li>• Additional indicators on co-benefits to be provided in the 2022 MELIA plan</li> </ul> |
| More information on metrics, methods and deliverables   | <ul style="list-style-type: none"> <li>• To be provided in MELIA plan and work plan</li> <li>• Process kicked off during initiative inception meeting (May 9-12, 2022)</li> <li>• MELIA lead (60%) and MELIA team established</li> <li>• Program manager (100%)</li> </ul>                     |
| Specify baseline information                            | <ul style="list-style-type: none"> <li>• National communications to UNFCCC (GHG inventories, adaptation goals, financial needs, etc.)</li> <li>• Sub-national baselines (Living Labs) to be produced with stakeholders in 2022</li> </ul>  |
| Better justify country selection                        | <ul style="list-style-type: none"> <li>• World Bank governance indicators</li> <li>• Countries' willingness and capacity</li> <li>• CGIAR networks, legacy work, comparative advantage</li> </ul>  |
| Clarify linkages with other initiatives                 | <ul style="list-style-type: none"> <li>• Work towards synergies with AgroEcology, ClimBeR, LCSR, MegaDeltas, NATURE+, NEXUS Gains, and NPS</li> </ul>  |

## 4.2 Resilient Agri-food Systems

### 4.2.1 Livestock, Climate and System Resilience

| ISDC Recommendation                                  | Response  |
|--|---|
| Detail regarding the risks, but explain how mitigate | <ul style="list-style-type: none"> <li>• Mitigation measures will be explained</li> </ul> |
| Nice M&E, no detail on baselines                     | <ul style="list-style-type: none"> <li>• Baseline design forthcoming</li> </ul>           |

| ISDC Recommendation                         | Response   |
|---|--|
| Lack of capacity building targets           | <ul style="list-style-type: none"> <li>• These can be elaborated with time as budgets are clarified</li> </ul>                           |
| Difficult to assess skills of whole team    | <ul style="list-style-type: none"> <li>• This has been addressed in the staffing plan</li> </ul>   |
| Low level of commitment to local engagement | <ul style="list-style-type: none"> <li>• Also forthcoming in the inception plan, building on</li> <li>• a strong track record</li> </ul> |

#### 4.2.2 Sustainable Animal Productivity for Livelihoods, Nutrition and Gender inclusion (SAPLING)

| ISDC Recommendation  | Response   |
|--|--|
| No articulation of promising technologies  | <ul style="list-style-type: none"> <li>• SAPLING builds on decades of applied livestock for development and the initiative builds on a large inventory of innovations and innovation packages</li> </ul>   |
| Weak alignment with target countries priorities, regional and other CGIAR initiatives and weak focus on equitable partnerships | <ul style="list-style-type: none"> <li>• We have developed value chain Theory of Change for each selected value chain within each of the 7 target countries with and by the relevant stakeholders, to ensure that the priorities are aligned and equitable partnerships with national scientists</li> <li>• Discussions on synergies with other global initiatives particularly LCSR, OneHealth and Mixed Farming Systems</li> </ul> |
| Weak capacity development plan   | <ul style="list-style-type: none"> <li>• Capacity development plans have now been embedded in the value chains TOCs and WP workplans</li> </ul>  |

#### 4.2.3 Protecting Human Health through a One Health Approach

| ISDC Recommendation   | Response   |
|---|--|
| Build synergies with other CGIAR research:  | <ul style="list-style-type: none"> <li>• Use of common set of tools and indicators to measure common outcomes</li> <li>• Co-location: One Health with SAPLING in Ethiopia, Kenya, Uganda, and Vietnam, with LCSR in Ethiopia, India, and Uganda</li> </ul>   |
| Strengthen/clarify external partnerships:   | <ul style="list-style-type: none"> <li>• The CGIAR has conducted over 15 years of research on zoonoses, food safety, AMR, and safe use of wastewater. We have developed strong relationships with national and other partners during this time and will build on these partnerships to deliver research that positioned for immediate impact.</li> <li>• Partnerships with the private sector: historically One Health has had limited engagement with the private sector – it has been focused on public sector institutions. We will strengthen this. Our initial discussion with potential private sector partners has been positive and we will work to build these links (17 Striggers, Land O’Lake Venture 37, BioSpring)</li> </ul> |
| What is the CGIAR comparative advantage in Water and AMR in water                               | <ul style="list-style-type: none"> <li>• Initiative is built on IWMI’s 20 years of experience in the safe use of polluted water in food production and development of Resource Recovery and Reuse (RRR) of waste within the Water, Land &amp; Ecosystem CRP and CGIAR AMR Hub</li> </ul>   |
| What is the plan for capacity development of early career researchers in partner organizations? | <ul style="list-style-type: none"> <li>• PhD training and leverage from other One Health projects</li> </ul>   |

#### 4.2.4 Resilient Aquatic Food Systems for Healthy People and Planet

| ISDC Recommendation  | Response   |
|--|--|
| Strengthen project management mechanisms   | <ul style="list-style-type: none"> <li>• Involve all of WorldFish’s senior scientists and several of the IWMI’s senior scientists in the management of the Initiative.</li> <li>• IDT led by the WorldFish Director of Science and Research.</li> <li>• Hold quarterly meetings of the leadership team, consisting of the Initiative’s leader and deputy leader, WP leaders, country leads, MELIA leads and three cross-cutting thematic leads for nutrition and health, gender and social inclusion, and climate and environment, respectively</li> <li>• Create a matrix management structure so that country-program leads play a crucial role in ensuring that countries implementing multiple work packages (including from other initiatives) work with inputs from various WP leads and leverage synergies.</li> <li>• Form a science advisory board that includes senior scientists and leaders from CGIAR entities as well as from the broader community of stakeholders within aquatic food systems (academic scientists, policymakers, representatives from international organizations and the private sector).</li> </ul> |
| Implement actions to guarantee the future sustainability of the project's outputs and outcomes, including notably at the smallholder level   | <ul style="list-style-type: none"> <li>• We see our role in CGIAR as catalyzing existing or potential partnerships and supporting policy design.</li> <li>• We partner with many networks of researchers, civil society organizations, and intergovernmental and regional bodies that support ongoing mechanisms for upscaling and adoption of innovations.</li> </ul>   |
| Strengthen the explanation of the role and engagement of partners and stakeholders and ensure that the related assumptions that underpin impact pathways are addressed in a continuous and proactive manner. | <ul style="list-style-type: none"> <li>• In the ongoing inception phase, deeper engagement with partners is taking place, consultation and definition of their role are needed in the implementation and the impact pathways. Partnership with Royal Rhoads Univ, Canada in this initiative, on ToC development, will pioneer improved use of ToC in project management across One CGIAR. Five country-level workshops planned in 2022.</li> <li>• Synergies with other initiatives and bilateral projects are now more apparent as in-country workplans solidify. e.g. ACIAR projects in Solomon Islands and Timor Leste, USAID and BMGF projects in Bangladesh.</li> </ul>   |
| Ensure integration of the work package on new varieties (WP4) with other work packages.  | <ul style="list-style-type: none"> <li>• Innovations developed in WP4, both in terms of varieties and scaling mechanisms (PPPs), are considered in WP2, 3 and 5 when and where contextually appropriate.</li> <li>• Synergies have also been developed through co-investment outside the Initiative: Fish for Africa Innovation Hub, Namno Initiative EoI.</li> <li>• Choice of combinations of the work packages in the countries are based on the diagnosis of the state of the research and innovation system for aquatic food systems in each country and what value our work can add under the constraint of financial and time resources. Assuming three phases of the RAqFS initiatives (2022–2025, 2025–2028, 2028–2031), most focal countries would benefit from the synergies between the five work packages by the end of the program cycle.</li> </ul>   |

#### 4.2.5 Excellence in Agronomy for Sustainable Intensification and Climate Adaptation

| ISDC Recommendation  | Response   |
|--|--|
| The risk assessment should be strengthened   | <ul style="list-style-type: none"> <li>The Use Case model and its underlying due diligence processes are expected to address many of the risks associated with partner performance and uptake of agronomic solutions.</li> </ul>   |
| Furthermore, data to action does not occur automatically   | <ul style="list-style-type: none"> <li>Correct; the Use Case model is meant to contain the relevant partnerships that facilitate the application of recommendations.</li> </ul>  |
| The word "mitigation" appears as an ornament because actual actions for mitigation are not included, even marginally | <ul style="list-style-type: none"> <li>We accept that 'mitigation' is referred to without much detail; we have direct mitigation-related activities:               <ol style="list-style-type: none"> <li>An indicator related to the agronomic gain KPI framework focusses on reducing product based GHG emissions by 25% and another indicator focusses on soil health, which is directly related to soil organic carbon;</li> <li>All MVPs will be made climate adaptation/mitigation explicit by ensuring that recommendations/solutions included in the MVP directly address climate change; and</li> <li>The priority research theme on perennials for livelihoods and conservation will focus on increasing productivity and profitability of perennials (e.g., cocoa, coffee) aligned with zero deforestation</li> </ol> </li> </ul> |

#### 4.2.6 NATURE+: Nature-positive Solutions for Shifting Agrifood Systems to More Resilient and Sustainable Pathways

| ISDC Recommendation                                   | Response   |
|---|--|
| Too much emphasis on Industrial Agriculture Narrative | <ul style="list-style-type: none"> <li>Industrial agriculture is the root cause because public incentives and policies continue to encourage industrial agricultural systems over sustainable, nature-positive types of farming. Only one system of incentives is in place, which encourages even smallholder farmers to adopt unsustainable practice. In other words, we refer to industrial agricultural not based on the size of the farm but the political economy system that led to the negative impact of agriculture and which is still in place.</li> </ul> |
| Specific Country Analysis                             | <ul style="list-style-type: none"> <li>Challenge analysis will be refined in target countries during start up, as we started already in Kenya and Burkina Faso.</li> </ul>   |
| Structure of the WPs                                  | <ul style="list-style-type: none"> <li>Perceived overlaps in WP design are explicitly designed feedback loops and synergies designed to support NATURE+ that are multidisciplinary and multi-thematic, including conservation, restoration and production and recycle.</li> </ul>  |
| Conservation and Use                                  | <ul style="list-style-type: none"> <li>Yes, conservation without utilization is ineffective; hence the IDT designed WP1 to focus on conservation and WP2 to focus on using the outputs of conservation (seeds) in production and value chains</li> </ul>   |
| Seed Systems  | <ul style="list-style-type: none"> <li>Novel aspect of seeds system intervention is focus on role of informal seed system actors (e.g., grain traders, small community seed businesses) in NPS and CGIAR technology outscaling</li> </ul>  |

#### 4.2.7 Resilient Cities Through Sustainable Urban and Peri-urban Agrifood Systems

| ISDC Recommendation  | Response  |
|--|---|
| Flesh out major directions and how the most promising areas from previous research will be fast tracked                  | <ul style="list-style-type: none"> <li>Completed CoSAI review of recent CGIAR and non-CGIAR research and innovations in urban and peri-urban agriculture and identified fast-track starting points for the Initiative.</li> <li>Have facilitated co-design of research and scaling plans for each Work Package and in most priority countries.</li> </ul>   |
| Strengthen the components concerned with implementation and scaling ensuring strong co-design with the range of partners | <ul style="list-style-type: none"> <li>Implementation plans have been developed over past 6 months, jointly with local and national partners from different levels of government, civil society, and private sector as well as with research and scaling partners.</li> </ul>   |
| Consider strengthening trade aspects, including elements such as transport, storage and marketing innovations            | <ul style="list-style-type: none"> <li>We do address technologies (storage, retail, digital logistics, food safety, waste reduction, resource recovery) as well as related business models and supportive policy options.</li> <li>Focus on 'food catchment' of cities; detailed research on regional and international trade is outside the scope of this Initiative but will link with Markets and Value Chains initiative in this regard.</li> </ul> |
| Include radically new approaches such as vertical farming, cellular and plant-based animal food substitutes.             | <ul style="list-style-type: none"> <li>We will examine advanced technology innovations with the objective to better understand their potential contribution to CGIAR impact areas.</li> <li>Recently completed with CoSAI a review of Controlled Environment Agriculture (CEA) in this context</li> </ul>   |

#### 4.2.8 Sustainable Intensification of Mixed Farming Systems

| ISDC Recommendation  | Response   |
|--|--|
| <p>Rethinking the impact statements especially with regard to more appropriate performance indicators</p> <p>Improving the impact assessment plans; further justification for the measurable three-year outcomes;</p> <p>Need for a more detailed budget breakdown and realistic budget for scaling readiness activities due to the complexity inherent in scaling innovation packages.</p> <p>Explicit recognition of the risks posed by the COVID pandemic and political instability in some of the target countries is also needed.</p> | <ul style="list-style-type: none"> <li>Feedback compiled by team and submitted to RAFS Directorate on 1 March 2022</li> <li>Leadership team started to make some changes to the submitted proposal structure- specifically on MELIA and TOC (3 internal meetings by MELIA)</li> <li>SI-MFS team attended Webinar for Projected benefits as a means to address any ISDC needed changes on 08/03/2022. Presentation by Gil Yaron was on "Learning from the CGIAR Projected Benefits Work: A rapid after-action review "</li> </ul> |

## 4.3 Genetic Innovation

### 4.3.1 Genebanks

| ISDC Recommendation  | Response   |
|--|--|
| Clarity of objectives and research questions needs improvement | <ul style="list-style-type: none"> <li>Rephrasing and clarification: ongoing - updated proposal through online submission tool (Jun 30)</li> </ul> |

| ISDC Recommendation   | Response  |
|---|---|
| Planned activities, geographical and crop foci, time frames, and resource requirements needs more explanation | <ul style="list-style-type: none"> <li>Developed WP leaders &amp; Genebank managers, and revised/finalized by the Interim Management team in Rabat meeting</li> <li>Detailed plans of work per workpackage and per center, with defined deliverable, baseline, target, milestone and indicators</li> <li>Detailed crops and countries where activities will be implemented</li> </ul> |
| Planned key partner and stakeholder engagement processes and roles to ensure their participation              | <ul style="list-style-type: none"> <li>engage regional/crops networks and organizations as means of multiplying impact with NARS,</li> <li>consider existing survey/lit re capacity needs</li> <li>involve transparent partner selection processes</li> </ul>   |
| Role and reach of national genebanks  | <ul style="list-style-type: none"> <li>Creating global cryopreservation network</li> <li>Greenpass System for safe management and expedited transfer of healthy germplasm</li> <li>Genetic Resources Policies in Support of the Global System</li> </ul>  |

#### 4.3.2 Market Intelligence

| ISDC Recommendation  | Response  |
|--|---|
| Consider crops' biological constraints (genetic and physiological variations).   | <ul style="list-style-type: none"> <li>Agree. These are considered in WP2's ToC. WP2 confronts demand with supply (cost feasibility) side to ensure that product profiles are realistic and can be bred in a cost-effective manner.</li> <li>Accelerated Breeding WP1 and Market Intelligence WP2 co-fund biophysical scientists to strengthen the linkages between both Initiatives.</li> </ul>  |
| As customers do not always know what they want, use other information and feedback loops to make sure the TPPs are right | <ul style="list-style-type: none"> <li>Agree. WP3 explores what other behavioral conditions need to be in place for varietal adoption.</li> <li>We are building feedback loops between WP1, 2 and 3. WP1 identifies market while WP2 feeds back information on what kind of market intelligence to look for. WP3 feeds back behavioral information to WP2 for TPP design.</li> </ul>  |
| There is no clearly mapped capacity building framework   | <ul style="list-style-type: none"> <li>Agree. We will develop a capacity building framework under WP5's GxI Learning Alliance.</li> <li>We have started collaboration with Cornell University and Makerere University to jointly develop a capacity building framework.</li> </ul>  |
| Open Data & Open Access protocols and plans are vague  | <ul style="list-style-type: none"> <li>Agree. Details on protocols will be developed by Digital Transformation Initiative.</li> <li>Market Intelligence Initiative is one of the users of the outputs from Digital Transformation WP5 (Enabling Digital Platforms and Services for R&amp;D Practitioners).</li> </ul>   |
| There is a need for impact focused metrics   | <ul style="list-style-type: none"> <li>Agree. The Initiative will measure and report on progress along its ToC, with metrics of outputs and outcomes towards SDG impacts.</li> <li>WP1 and WP4 are collecting an extensive set of indicators and metrics of impact opportunities, which will be used to develop ex-ante and ex-post impact assessment strategies in WP4 and WP5. The team is closely coordinating with SPIA.</li> </ul> |

### 4.3.3 Accelerated Breeding

| ISDC Recommendation    | Response   |
|------------------------|--|
| More scientific detail | <ul style="list-style-type: none"> <li>Work plans have been developed for 21 crops outlining the objectives and tasks to achieve results as described in the Results Framework.</li> </ul>   |
| More budget detail     | <ul style="list-style-type: none"> <li>Budget, budget narrative and Plan of Work (POW) developed and submitted</li> </ul>  |
| More training detail   | <ul style="list-style-type: none"> <li>Training will be A. outcome oriented, i.e., to achieve desirable Results. B. aligned to distinct needs (CGIAR, NARES)</li> <li>Accelerated Breeding will focus on capacity building in optimizing breeding pipelines.</li> <li>Breeding Resources will focus on capacity building for use of tools, technologies and services.</li> <li>Current focus: aligning workplans and using project management tool across 100+ scientists, 7 centers and 23 crops</li> </ul> |
| Other clarifications   | <ul style="list-style-type: none"> <li>Gene editing is addressed by the "Genome Editing" Initiative</li> <li>Scope clarified with Genebanks regarding trait discovery and trait deployment (upstream breeding / pre-breeding /parent development)</li> </ul>   |

### 4.3.4 Breeding Resources

| ISDC Recommendation   | Response   |
|---|--|
| Data management should be standardized and searchable.  | <ul style="list-style-type: none"> <li>We have initiated the data governance network for breeding data, with the approval of Digital Services and ABI WP3</li> </ul>   |
| Capacity development—describe training for partners and stakeholders a little more explicitly.  | <ul style="list-style-type: none"> <li>We have assigned regional "change leads" (senior scientists and leaders from each Center). They will have two major tasks in 2022:               <ol style="list-style-type: none"> <li>lead regional demand assessment for services and technologies, which will include capacity building needs.</li> <li>develop a change management plan</li> </ol> </li> <li>We will provide explicit opportunities for specialized training in professional operational skillsets like process management, project management.</li> </ul> |
| More details on partnerships. What incentives and processes would be in place to establish and manage innovative partnerships?  | <ul style="list-style-type: none"> <li>Breeding Resources follows the lead of ABI in the development of breeding network partnerships with NARES. For research/technical partnerships, we proposed a technical advisory committee to assess and prioritize technologies and potential partners – we are waiting for more clarity on GI level committees to avoid duplication and meeting overload.</li> </ul>  |
| Adoption is critical. There should be a plan to monitor the shape, quality, and distribution of the data to ensure quality and usefulness and screen for lapses in quality control. | <ul style="list-style-type: none"> <li>This is a part of what we intend as part of the performance management dashboard proposed in WP3.</li> </ul>  |

### 4.3.5 Seed Equal

| ISDC Recommendation                             | Response   |
|---|--|
| Projected benefits                              | <ul style="list-style-type: none"> <li>Re-calculating and clarifying (at the GI level): ongoing - updated proposal through online submission tool (Jun 30)</li> </ul>  |
| Detailed activity level budget                  | <ul style="list-style-type: none"> <li>Detailed activity level budget is now available and developed according to System Office guidelines and validated by the SO designated IDT Finance Officer</li> </ul>   |
| Outcomes for gender and youth                   | <ul style="list-style-type: none"> <li>WP6 will undertake a systematic review at the outset on what works and what does not in providing inclusive access to seed. This knowledge in combination with multi-stakeholder consultations in different contexts will help refine the strategies/approaches to be tested per context. Research questions are being refined and adapted in the light of this review in the updated proposal through online submission tool (Jun 30) .</li> <li>WP5 will complement this work with an explicit and strengthened emphasis on policy options to reach disadvantaged farmers.</li> </ul> |
| Integration of formal and informal seed systems | <ul style="list-style-type: none"> <li>Additional activities will be described in the plan of work and budget to be developed to include aspects that improve outcomes for gender and youth through equitable seed systems including farmer-based seed systems updated proposal through online submission tool (Jun 30).</li> <li>Additional partnerships will be sought or strengthened to enhance our capability to better integrate formal and Informal (farmer-based) seed systems. Ongoing discussions with CDI WUR team.</li> </ul>  |

## 4.4 Regionally Integrated Initiatives

### 4.4.1 Driving Food Security, Inclusive Growth and Reducing Out Migration in Latin America and the Caribbean (LAC)

| ISDC Recommendation  | Response   |
|--|--|
| Need for clear identification of AgriLAC's impacts vs other initiatives  | <ul style="list-style-type: none"> <li>Recognition of interdependency and need of alignment between AgriLAC and Global Thematic Initiatives (GTI), close articulation in the first phase of implementation.</li> <li>Such articulation will be facilitated by the implementation of Integrated Agri-food Systems Initiative (IASI) methodology.</li> </ul>   |
| Need for more clarity on AgriLAC Resiliente scaling approach   | <ul style="list-style-type: none"> <li>AgriLAC Resiliente will bring proven innovations from Colombia, Mexico and Peru to Central American countries to be tested, validated, adapted and improved and then, return the lessons learned and further innovations applicable back in those countries.</li> <li>Scaling in AgriLAC Resiliente is not unidirectional but rather it is a process with several feedback loops in both directions so that collective learning and innovation occurs across the region.</li> </ul> |
| Need for further details on MELIA approach of the Initiative to observed changes.<br>AgriLAC will build on and adapt the e-agrology system for monitoring key indicators useful to measure outcomes. | <ul style="list-style-type: none"> <li>AgriLAC will adapt the MEL plan yearly, in coordination with the WP leads, more often during the first year.</li> <li>Separating impacts is indeed a challenge, however we plan to estimate impacts of particular activities that will contribute to the overall impact at the initiative level (focus on baseline data and initial impacts given the 3-year timeframe).</li> </ul>   |



| ISDC Recommendation | Response   |
|---------------------|--|
|                     | <ul style="list-style-type: none"> <li>• AgriLAC will use MEL data and the learning studies to account for the contribution of the initiative to observed changes.</li> <li>• AgriLAC will build on and adapt the e-agrology system for monitoring key indicators useful to measure outcomes.</li> </ul> |

#### 4.4.2 *Ukama Ustawi (UU): Diversification for Resilient Agrifood Systems in East and Southern Africa (ESA)*

| ISDC Recommendation                         | Response  |
|---|---|
| Need for increased capacity building        | <ul style="list-style-type: none"> <li>• UU has added an East and South Africa learning platform as one of the hubs under UU</li> <li>• Capacity building is now integrated into all work packages</li> <li>• Community-based design and co-creation in full collaboration with NARES partners to allow for joint learning</li> <li>• Capacity strengthening of agriculture SMEs/start-ups from support organizations and UU technical assistance</li> <li>• Strengthening researchers' capacity to translate and communicate results, including to policy makers</li> <li>• Building gender equity and social inclusion skills</li> <li>• Capacity strengthening on the science and practice of scaling</li> </ul> |
| Integration and disciplinary silos of WPs   | <ul style="list-style-type: none"> <li>• Integration between work packages is critical for the success of the initiative</li> <li>• WP 4 has been rescoped to focus explicitly on governance and institutional arrangements. Environmental sustainability elements have migrated to WP 1.</li> <li>• Explicit links and synergies have been made through the kick-off workshop and activity planning</li> </ul>   |
| High level themes to include and strengthen | <ul style="list-style-type: none"> <li>• Livestock; governance, policies, and institutions; gender have been emphasized and integrated in all work packages.</li> </ul>   |
| Codesign processes                          | <ul style="list-style-type: none"> <li>• Partnerships with CCARDESA and ASARECA, the sub-regional NARES networks for ESA</li> <li>• PABRA as part of UU with its strong network with the NARES</li> <li>• Work with the NARES is included in WP1, WP2, WP4 and WP5.</li> </ul>  |

#### 4.4.3 *From Fragility to Resilience in Central and West Asia and North Africa (F2R-CWANA)*

| ISDC Recommendation  | Response   |
|--|--|
| The Initiative combines elements of two CGIAR Action Areas: Resilient Agrifood Systems and Genetic Innovation. The absence of a rationale in terms of "integrated systems approaches." | <ul style="list-style-type: none"> <li>• Elements of all three science areas (ST -WP1,5), GI -WP2), RAFA -WP2,3,4). For the integrated systems approach we apply better packaging of synergistic technological solutions (varieties, agronomic packages, diversification of cropping) supported by institutional and enabling policy arrangements along with the empowering of local communities and key stakeholders (access to inputs, markets, better transfer of technology).</li> </ul> |

| ISDC Recommendation   | Response   |
|---|--|
| Characterization of research problem—lack of hard evidence and scientific documentation of the scope of these problems and the corresponding prospects for the Initiative to address them at significant scale. | <ul style="list-style-type: none"> <li>We have revised and rewritten large parts of the research problem and have referenced them. A trans-disciplinary research approach has been used to deal with these specific challenges based on our experiences.</li> </ul>  |
| Analysis of trade-offs across Impact Areas Credible <i>ex-ante</i> assessment necessary to understand regional scope for impacts is absent.   | <ul style="list-style-type: none"> <li>The projections of beneficiaries and benefits in F2R were based on past <i>ex-ante</i> and <i>ex-post</i> studies and suitability analysis for different technologies using environmental and economic models, and agent-based modeling, to determine the long-term benefits.</li> </ul>  |
| Overall theory of change, especially lack of clarity on causal linkages and roles of partners in delivering outcomes and impacts.   | <ul style="list-style-type: none"> <li>We have re-focused the ToC based on work-package integration and synergies through the integration and two-way synergies between F2RCWANA and the Global Initiatives. The technologies will be tested, validated, evaluated synergies and trade-offs and packed in IPs situated on the ground in the agro-ecologies that have been prioritized by the National Alliance of Stakeholders.</li> </ul> |

#### 4.4.4 Transforming Agri-Food Systems in West and Central Africa (TAFS-WCA)

| ISDC Recommendation   | Response   |
|---|--|
| <p>The baseline studies planned should be clarified</p> <p>Consider food safety</p> <p>It is not clear what the capacity building targets in-country mean in terms of current deficit and bridging gaps</p> | <ul style="list-style-type: none"> <li>a more integrated approach to transform food systems, including food safety as part of the nutrition agenda</li> <li>how the Initiative would likely lead to impact at scale through integrated systems approaches and partnerships</li> <li>Stage-gate of fruit innovations</li> </ul> |

#### 4.4.5 Transforming Agrifood Systems in South Asia (TAFSSA)

| ISDC Recommendation   | Response   |
|---|--|
| Review prior research and other ongoing initiatives relevant to Work Package 3 and 4. | <ul style="list-style-type: none"> <li>Being addressed through scoping reviews and inception meetings.</li> </ul>  |
| Include institutional and policy analysis   | <ul style="list-style-type: none"> <li>Being addressed by refining existing and introducing new research activities in Work Packages 2 and 5.</li> </ul> |
| Integrate and connect WP theories of change   | <ul style="list-style-type: none"> <li>Being addressed through integrative activities across WPs</li> </ul>  |

#### 4.4.6 Securing the Food Systems of Asian Mega-Deltas for Climate and Livelihood Resilience

| ISDC Recommendation   | Response  |
|---|---|
| Clear understanding on how to: create, manage, and drive change through a multi-stakeholder coalition of partners; deliver field results and impact at scale; and | <ul style="list-style-type: none"> <li>Provided detailed response to ISDC comments incl. three action points per WP in February</li> <li>Currently revising the proposal following the ISDC comments by WP and as a whole (to be completed in June)</li> <li>Revision of results framework</li> </ul> |

| <b>ISDC Recommendation</b>  | <b>Response</b>  |
|---|--|
| <p>be realistic about what can be achieved by 2025</p> <p>Partner and stakeholder engagement in the design or whether they are an integral part of the project team</p> | <ul style="list-style-type: none"><li>• Engaging an external consultant to address two main comments of the ISDC in view of positioning of AMD and scaling potential</li></ul> |

## 5 References

CGIAR. 2020. *2030 Research and Innovation Strategy*. Montpellier, France: CGIAR. <https://cgspace.cgiar.org/bitstream/handle/10568/110918/OneCGIAR-Strategy.pdf>.

IAES. (2022, October 1). Reform advice. <https://iaes.cgiar.org/isdc/reform-advice>.

ISDC. 2020. *Quality of Research for Development in the CGIAR Context*. Rome: Independent Science for Development Council. <https://cas.cgiar.org/isdc/publications/quality-research-development-cgiar-context-0>.

ISDC. 2021. *QoR4D in Practice for One CGIAR*. Rome: Independent Science for Development Council. <https://iaes.cgiar.org/isdc/publications/quality-research-development-practice-one-cgiar>.

CGIAR Independent Advisory and Evaluation Service

Via di San Domenico 1, 00153 Rome, Italy

Email: [isdc@cgiar.org](mailto:isdc@cgiar.org)

URL: <https://iaes.cgiar.org/isdc>