



Independent  
Science for  
Development  
Council



TECHNICAL NOTE

# Quality of Research for Development in the CGIAR Context

January 2020

Cover image: Sita Kumari (right), farmer, uses mobile phone apps to enhance her yields and get access to market and labor. Photo by C. De Bode/CGIAR  
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## **About ISDC**

The Independent Science for Development Council (ISDC) is a standing panel of impartial, world-class scientific experts providing rigorous, independent strategic advice to the CGIAR System Council and other stakeholders. The ISDC contributes to the strategic and portfolio planning and positioning of CGIAR.

ISDC produces foresight work that informs CGIAR's longer-term research strategy. Horizon scanning complements long-term foresight work. Horizon scanning supplies analysis on how emerging trends and developments can be taken into account in CGIAR's work—examples of this work include expert input and multi-stakeholder dialogue to inform the CGIAR three-year business planning processes.

Emerging from the foresight and horizon scanning efforts, ISDC supplies System Council with advice on its priority setting exercises. System Council also seeks ISDC's guidance for periodic proposal assessment processes—depending on the modality the System selects for proposing work, the assessment form may range from document review to expert input on co-development opportunities.

Per its mandate, ISDC also assumes other functions, in consultation with System Council, that relate to the strategic direction of CGIAR and the value of its research agenda. For instance, the ISDC Chair advises the System Reference Group on the One CGIAR change process.

The ISDC provides its advice within the broader context of CGIAR's Strategy and Results Framework and business planning cycle. Its work and the functions laid out above are guided by terms of reference approved by the System Council.

## **Acknowledgements**

The CGIAR Independent Science and Partnership Council (ISPC) commenced the Quality of Research for Development (QoR4D) framework in 2017. The new Independent Science for Development Council (ISDC) carried the work forward in 2019 and published this *Technical Note* and companion *Brief* in January 2020. The ISDC expresses gratitude to all who contributed in the consultative QoR4D framework process.



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# QUALITY OF RESEARCH FOR DEVELOPMENT IN THE CGIAR CONTEXT

## 1. BACKGROUND AND CONTEXT

The CGIAR reform of 2020 involves a fundamental restructuring of CGIAR's partnerships, knowledge, and operations to enable the CGIAR System to deliver on its new mission of *ending hunger by 2030 through science to transform food, land, and water systems in a climate crisis*. The reform increases focus on connectivity to the Sustainable Development Goals (SDGs), especially SDG2, as a key framing for CGIAR. The SDG link provides shared targets related to ending hunger and malnutrition; doubling net incomes and productivity among small-scale producers, particularly women; ensuring sustainable production; maintaining genetic diversity; and adapting to climate change. To reach these targets, CGIAR will focus on five impact areas:

1. Nutrition and food security
2. Poverty reduction, livelihoods, and jobs
3. Gender equality, youth, and social inclusion
4. Climate adaptation and greenhouse gas reduction
5. Environmental health and biodiversity

The research modality planned to address these five impact areas will be articulated in a 2030 Research Strategy.

The Independent Science for Development Council (ISDC) can play an important role by providing advice on integrating the new research modality into the evolving One CGIAR structure to ensure the best possible outcomes in the five impact areas.

The ISDC's charter is to support CGIAR by ensuring that its research is not just of high quality but also has a clear path to impact for development outcomes. This task necessitates concerted action by diverse stakeholders and involves strategic partnerships for agricultural research for development (AR4D).<sup>1</sup> It also requires building knowledge from evidence, integrating knowledge from different disciplines, and translating that knowledge into action.<sup>2</sup> Science-based knowledge is more likely to be effective for sustainable development if it is respected and perceived as credible, salient, and legitimate.<sup>3</sup>

To address these needs, the Independent Science and Partnership Council (ISPC), reconstituted in 2019 as the ISDC, developed a Quality of Research for Development (Qo4RD) framework in 2017. The Qo4RD framework facilitates System-wide agree-

<sup>1</sup> Independent Science and Partnership Council (ISPC), *Strategic Study of Good Practice in AR4D Partnership* (Rome, 2015), [http://ispc.cgiar.org/sites/default/files/ISPC\\_StrategicStudy\\_Partnerships.pdf](http://ispc.cgiar.org/sites/default/files/ISPC_StrategicStudy_Partnerships.pdf).

<sup>2</sup> W. Clark, L. van Kerkhoff, L. Lebel, and G. Gallopin, "Crafting Usable Knowledge for Sustainable Development," *PNAS* 113 (2016): 4570-4578.

<sup>3</sup> D. W. Cash, W. C. Clark, F. Alcock, N. M. Dickson, N. Eckley, D. H. Guston, J. Jaeger, and R. B. Mitchell, "Knowledge Systems for Sustainable Development," *PNAS* 100 (2003): 8086-8091.

ment on the nature and assessment of the quality of science, a concept that was broadened beyond scientific credibility to include the likelihood of achieving development outcomes. This QoR4D framework was developed through a consultative process involving representatives from entities across the System involved in managing or assessing science quality.<sup>4</sup>

This document is a revision of the 2017 QoR4D, developed to assist the System Organization in designing research strategies and programs as they

transition to the new research modalities, in building new project-monitoring systems, and in designing performance management standards. It has been revised in consultation with the System Organization Programs Unit and the independent advisory services' Evaluation function. The intent of this document is to provide an overarching framing device for QoR4D, to be operationalized through program design processes and appropriate monitoring, evaluation, learning, and impact assessment mechanisms.

## 2. FRAME OF REFERENCE

The 2017 consultative process (revisited with targeted CGIAR entities in late 2019) led to a consensus that QoR4D should be viewed as an integrated whole consisting of four key elements—relevance, scientific credibility, legitimacy, and effectiveness<sup>5</sup>—that would form the basis for a common frame of reference across CGIAR.

1. **Relevance** refers to the importance, significance, and usefulness of the research objectives, processes, and findings to the problem context and to society and is associated with CGIAR's comparative advantage to address the problems. It incorporates strategic stakeholder engagement along the AR4D continuum, original and socially relevant research aligned to national and regional priorities, and the CGIAR Strategy and Results Framework (SRF)<sup>6,7</sup> and SDGs. It also recognizes the importance of international public goods.
2. **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.

3. **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 and consideration of the interests and perspectives of intended users. It suggests 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. Partnerships are built on trust and mutual commitment to delivery of agreed-upon outcomes.
4. **Effectiveness** means that research generates knowledge, products, and services with high potential to address a problem and to contribute to innovations and solutions. It implies

<sup>4</sup> ISPC, "Quality of Research for Development Workshop: Insights and Way Forward," Brief No. 52 (Rome, 2017), [http://ispc.cgiar.org/sites/default/files/events/ispc\\_qor4d\\_workshop\\_brief52\\_0.pdf](http://ispc.cgiar.org/sites/default/files/events/ispc_qor4d_workshop_brief52_0.pdf).

<sup>5</sup> Adapted from Cash et al., "Knowledge Systems for Sustainable Development," and B. M. Belcher, K. E. Rasmussen, M. R. Kemshaw, and D. A. Zornes, "Defining and Assessing Research Quality in a Transdisciplinary Context," *Res. Eval.* 25 (2016): 1-17.

<sup>6</sup> CGIAR, *A Strategy and Results Framework for the CGIAR* (Montpellier, France, 2011), [https://cgspace.cgiar.org/bitstream/handle/10947/2608/Strategy\\_and\\_Results\\_Framework.pdf](https://cgspace.cgiar.org/bitstream/handle/10947/2608/Strategy_and_Results_Framework.pdf).

<sup>7</sup> CGIAR, *CGIAR Strategy and Results Framework 2016-2030* (Montpellier, France, 2015), <https://cgspace.cgiar.org/handle/10947/3865>.



that research is designed, implemented, and positioned for use within a dynamic theory of change, with appropriate leadership, capacity development, diversity of research skills, and support to the enabling environment to translate knowledge to use and to help generate desired outcomes. To achieve target outcomes, research requires a clear path to impact in one or more of the five impact areas, regardless of where it sits along the spectrum from fundamental to applied research.

The frame of reference rests on a number of core principles:

1. Simple and understandable language that is fit for purpose;
2. Collaborative design and ownership;
3. Living frame of reference that not only provides a solid foundation to support the design of long-term programs, subject to periodic revision, but is also dynamic and forward-looking;
4. Alignment with the CGIAR Strategy; and
5. Equal application of the frame of reference to current and new research (though outcome and impact assessment and documentation of past research remain important).

### 3. HOW THE FRAME OF REFERENCE IS USED

This integrated QoR4D frame of reference aims to bring coherence to the System and enhance the overall quality of AR4D within Centers, Programs, and Platforms, guiding their strategies, research activities, definition and implementation of individual projects, and management of team and individual scientist performance. The frame of reference helps focus attention on:

- how research strategies and specific research questions are developed and defined (including who is involved and how relevance is determined);
- how teams and the overall Center, Program, and Platform are organized to ensure that all the functions needed to translate research into intended outcomes and impact are performed;

- whether and how intended outcomes are being realized; and
- whether learning systems are in place and working to support ongoing reflection, lesson learning, and improvement.

It also encourages an integrated and coherent approach to Program design and evaluation. While operational implementation will be driven by the specific needs of different functional areas (e.g., Program research teams, evaluation), a common frame of reference will provide an underlying coherence to the assessment of research and science quality and prevent the emergence of multiple approaches to assessing this quality across CGIAR.



## 4. CASE STUDIES

QoR4D needs and considerations will be different within different CGIAR entities and at different scales. The following case studies from different entities across the System provide a brief overview of key considerations and suggest approaches for designing, implementing, assessing, and managing QoR4D at each level, from Centers and CGIAR Research Programs to performance management for individual scientists. In 2017 a consultative working group involving Centers, Programs, and the Independent Evaluation Arrangement solicited good practices and generated these Center and Program case studies.

### 4.1 The Frame of Reference in a Center: An ILRI Case Study

#### Corporate level

**Relevance.** The relevance of ILRI's research is guided by the CGIAR SRF, the ILRI Corporate Strategy, and the ILRI Science Strategy, which in turn influence ILRI's Program and regional strategies. ILRI engages and consults with key stakeholders at global, regional, and country levels through a number of existing fora (e.g., the Global Agenda for Sustainable Livestock, the Livestock Global Alliance, the Forum for Agricultural Research for Africa and its subregional organizations, and national R&D coordination platforms such as the Rural Economic Development and Food Security [RED&FS] initiative in Ethiopia). At the Program level, ILRI uses specific consultations to help establish research priorities and its own comparative advantage; large individual projects may have their own steering or advisory committees. ILRI also relies on Program theories of change<sup>8</sup> to assess relevance and prioritization.

**Scientific credibility.** Scientific credibility can be thought of as the quality of inputs and outputs. On the input side all research proposals are reviewed internally and approved by the Program leader before

being signed off on by the deputy director general. The Research Methods Group provides input on research design, statistical methodologies, and other issues. Research outputs are approved by the Program leader and, depending on the type of output, may be peer reviewed internally. External peer review through publication in peer-reviewed journals is the principal external means of verifying science quality.

**Legitimacy.** Partnerships are central to ILRI's core business. Engagement with partners is guided by ILRI's partnership strategy, which identifies different types of partners and modes of engagement, ensuring long-term relationships and mutual trust and respect. All research projects are subject to review and approval by the Institutional Research Ethics Committee, which is registered with and recognized by the National Commission for Science and Technology in Kenya. Where relevant, projects are reviewed and approved by the Institutional Animal Care and Use Committee and the Institutional Biological Safety Committee. Nearly all publications are open access, and ILRI is working toward ensuring that all data are open access.

**Effectiveness.** ILRI takes a number of measures to ensure that its research generates knowledge, products, and services that stimulate actions that address problems and contribute to solutions and innovations. ILRI research Programs are structured such that the discovery, proof of concept, piloting, and scaling phases of research are managed as a continuous pipeline. As with relevance, ILRI relies on the Program theories of change to help ensure effectiveness. As part of effectiveness, it also places considerable emphasis on communications and individual, organizational, and institutional capacity development.

<sup>8</sup> ILRI both contributes to the development of the theories of change of the Programs in which it participates and benefits from their implementation.

## Management of QoR4D

QoR4D is primarily the strategic responsibility of the deputy director general for research, but much of the operational management is devolved to the institutional program level. Each program has a strategy that covers that program's overview and rationale, objectives, main areas of research, alignment with Programs (i.e., CGIAR Research Programs or CRPs), theory of change (linked to CRP theories of change), regional engagement, links with other ILRI programs, partnerships, capacity development, communications, gender, and budget and resource mobilization. In addition, each program has a three-year rolling operational plan giving details of, among other things, projected outputs, outcomes, communications, and capacity development.

## Individual researcher level

At the individual level, each researcher is evaluated annually against eight criteria. For each criterion, there is a range of acceptable levels of performance. Every researcher is not expected to perform at the same level across all criteria, although there are minimum levels of performance for some criteria. For example, one researcher might publish at a higher rate while another might contribute more to development outcomes. These eight criteria and how they correspond with the elements of QoR4D are shown in Table 1.

**Table 1.** Criteria Used to Assess Performance of Individual Researchers or Small Teams through a QoR4D Lens

CRITERION	ELEMENT
<b>Research activities</b> <ul style="list-style-type: none"> <li>• Scale of activities</li> <li>• Resource mobilization</li> <li>• Collaboration across the One CGIAR System</li> </ul>	Relevance, scientific credibility
<b>Research outputs</b> <ul style="list-style-type: none"> <li>• Publications*</li> <li>• Other outputs</li> </ul>	Scientific credibility, relevance
<b>Institutional development</b> <ul style="list-style-type: none"> <li>• Involvement in institute committees, task forces, panels, etc.</li> </ul>	Legitimacy
<b>Path to impact</b> <ul style="list-style-type: none"> <li>• Clear path to impact identified in research design, theory of change, collaborations, etc.</li> </ul>	Relevance, effectiveness
<b>Influence on policy and practice</b> <ul style="list-style-type: none"> <li>• Engagement with end users, national agricultural research systems, NGOs, and funding partners</li> <li>• Effective communication of research</li> </ul>	Relevance, effectiveness
<b>Capacity development</b> <ul style="list-style-type: none"> <li>• Supervision of graduate fellows</li> <li>• Training and accompaniment/mentoring</li> </ul>	Effectiveness
<b>Partnerships</b> <ul style="list-style-type: none"> <li>• Development, leadership, or management of partnerships</li> <li>• Involvement of partners in design and implementation</li> </ul>	Legitimacy, effectiveness
<b>Resource management</b> <ul style="list-style-type: none"> <li>• Management of staff and other resources</li> <li>• Adherence to institute policies and procedures</li> </ul>	Legitimacy

\* Each scientist is expected to produce an average of two to four refereed papers per year, depending on grade and role.

## 4.2 The Frame of Reference in a Program: An FTA Case Study

The following case study provides an example of how a Program (Forest, Trees, and Agroforestry, or FTA) would use and implement the frame of reference at different scales, from the Program level to performance management for individual researchers or small research teams.

### Program-level strategy, program design, and implementation

**Relevance** is realized in the FTA's overall strategy and theory of change, which take account of the CGIAR SRF and system-level outcomes, international processes and debates within the FTA mandate, research and policy processes in key countries, and advances in science. Achieving relevance also requires ongoing engagement with stakeholders, partners, and processes, as well as *ex ante* impact assessment and priority setting, with periodic review and updating of the FTA strategy.

**Scientific credibility** means maintaining a reputation as a leading, science-based research program in one's mandate area and as an "honest broker." The main tests and demonstrations of scientific credibility are data-management systems that meet or exceed international standards and scientific peer review through regular ongoing publication of FTA research in international peer-reviewed journals.

**Legitimacy** means ensuring that systems are in place to engage and appreciate stakeholder perspectives. Such systems include appropriate ethical review protocols, review of gender-sensitive research practices using the Gender Equity in Research Scale (GEIRS), and performance management systems that recognize and reward engagement and relationship building.

**Effectiveness** at the Program level requires orienting overall systems and management to ensure that all necessary functions are performed at all stages in

the research cycle to contribute to significant outcomes and impacts. Among other things, this means having good strategic intelligence, appropriate and high-quality partnerships, strong capacity development, effective communications (from upstream to downstream), and strong systems of monitoring, evaluation, and impact assessment (MEIA). Effectiveness is assessed through ongoing monitoring, including of indicators that come below intermediate development outcomes (IDOs); through systematic outcome evaluation and impact assessment; and through ongoing testing and updating of FTA- and flagship program-level theories of change, as set out in the FTA MEIA strategy.

### Flagship program-level strategy, research focus, design, and implementation

Considerations and tests of relevance, scientific credibility, legitimacy, and effectiveness at the flagship program level will be similar to those that the Program level but with more detail about partners, stakeholders, and users and more specific and more easily testable theories of change. These are not elaborated here to save space.

### Activity (grant)-level research definition, design, and implementation

Individual activities and clusters of activities will be reviewed and assessed to achieve high-quality AR4D. FTA is developing a priority-setting process for window 1+2 (W1+2) funded activities that will use the following (still draft) criteria.

**Relevance.** The proposed work clearly demonstrates the relevance of the work to the intended users and to the FTA theory of change.

**Scientific credibility.** The proposed work clearly explains the scientific rationale, research question(s), and methods, giving confidence that research findings will be novel, robust, and scientifically trustworthy.

**Legitimacy.** The proposed work clearly explains how the work will take account of and reflect stakeholders' perspectives and values.

**Effectiveness.** The proposed work demonstrates that the work is deliberately and convincingly positioned to contribute to significant outcomes, with high potential to contribute to FTA IDOs and CGIAR System-level outcomes (SLOs).

**Contribution to international public goods.** The proposed work has high potential to develop methods and/or new knowledge that will have international public goods value.

**Strategic value.** The proposed work has high potential to add value at the FTA Program level and will use W1+2 funds to strategically build on bilateral funding and leverage it to help realize the FTA theory of change.

**Program building.** The proposed work has high potential to contribute to the growth of FTA by developing and strengthening partnerships, generating additional development opportunities, and attracting and leveraging new resources.

Research quality will be tested *ex post* through FTA's theory-based outcome evaluations and, where appropriate, experimental and quasi-experimental impact assessments.

## Individual and/or team performance management

FTA recognizes that achieving high-quality AR4D requires having well-focused performance management for individuals and teams. Team composition and related cross-cutting services and support need to help ensure that all necessary functions to support and encourage knowledge translation are in place.

Individual performance contracts and appraisals must balance expectations with adequate rewards and support for scientists and other staff to do research that is relevant, scientifically credible, legitimate, and effective. FTA is working with partner centers to develop shared performance assessments of team leaders and opportunities to provide input and feedback on individual performance appraisal.

Table 2 provides a list of five criteria for assessing the performance of research Programs and projects that encompasses inputs, processes, outputs, and outcomes.

**Table 2. Criteria Used to Assess Programs (and/or CGIAR Projects)**

CRITERION	ELEMENT
<p><b>Research design</b></p> <ul style="list-style-type: none"> <li>● Theory of change with clear outputs, outcomes, impacts</li> <li>● Innovation/novelty of design and implementation pathway</li> <li>● Flexibility to adaptively manage research Program</li> <li>● Collaboration across the One CGIAR System</li> <li>● Co-design with partners, funding partners</li> <li>● Impacts of research on natural resources and greenhouse gas emissions</li> <li>● Gender-sensitive research design and implementation</li> </ul>	<p>Scientific credibility, legitimacy, relevance</p>
<p><b>Research implementation</b></p> <ul style="list-style-type: none"> <li>● Research skills available to deliver outputs and outcomes</li> <li>● Availability of resources, infrastructure to implement</li> <li>● Partnership effectiveness (internal and external)</li> <li>● Ethical involvement of end users and partners and their ongoing commitment to the Program</li> <li>● Internal review mechanisms and delivery on milestones</li> <li>● Mentoring and training of junior research staff</li> </ul>	<p>Scientific credibility, effectiveness, legitimacy</p>
<p><b>Research outputs</b></p> <ul style="list-style-type: none"> <li>● Quality and quantum of research and technical publications</li> <li>● Development of physical products (e.g., germplasm, digital innovations)</li> <li>● Communication of research findings</li> </ul>	<p>Scientific credibility, relevance</p>
<p><b>Influence on policy, practice, and outcomes</b></p> <ul style="list-style-type: none"> <li>● Adoption of research by end users, national agricultural research systems, funding partners</li> <li>● Attributable evidence of changes in policies</li> <li>● Impact on farmers (e.g., changes in net income)</li> </ul>	<p>Relevance, effectiveness</p>
<p><b>Program management</b></p> <ul style="list-style-type: none"> <li>● Achievements against planned milestones, outcomes</li> <li>● Capacity changes in research teams</li> <li>● Identifiable lessons for future Programs and projects</li> <li>● Documentation of unintended consequences (social, environmental)</li> </ul>	<p>Effectiveness</p>

### 4.3 ISDC Implementation

The key purpose of the ISDC is to act as an independent advisor to the System Council on science and research matters, including strategies for effective partnerships along the research for development continuum. It aims to thereby enhance CGIAR's contribution to the five impact areas and thence to the achievement of the SDGs. ISDC does this by drawing upon expertise across and beyond the CGIAR System and conducting its own analysis of the information acquired to maintain the independence of its advice. Here we describe how thinking about the four elements of the frame of reference will help improve the QoR4D being undertaken by CGIAR. We also suggest standards that could be used by the System Organization, independent evaluation and impact assessment teams, and CGIAR Centers, Programs, and Platforms as a guide to identifying indicators specific to the different scales of QoR4D implementation.

**Relevance.** Clarity of goals and objectives is key to enhancing relevance. The overarching document guiding the CGIAR System is the SRF, and the ISDC undertakes various activities to strengthen alignment between the research questions addressed by CGIAR and the global goals articulated in the SRF. The ISDC ensures relevance by taking an evidence-based approach to supporting research programming and major potential shifts in the focus of CGIAR research. ISDC also provides robust advice on the core science and development challenges inherent in delivering on CGIAR's System goals and on how these challenges should be tackled in the System's research and innovation agendas.

**Scientific credibility.** Scientific credibility depends on the robustness and rigor of research methodologies and the capabilities of researchers and research teams. The ISDC's role here is primarily to provide independent feedback to donors on these criteria in assessments of CGIAR's research strategy and program modalities. The gold standard internationally is external peer review, but the training, mentoring, and management of researchers are also important.

**Legitimacy.** Research ethics are increasingly recognized as an essential element of quality, and specifically of the legitimacy of research for development efforts. At the very least, a research ethics committee must be in place. Furthermore, researchers must be trained in ethics. These principles were adopted in a 2019 review of ethics in CGIAR conducted by the CGIAR System Internal Audit Unit (IAU). The IAU recommended developing a common CGIAR Code of Research Ethics comprising standards and guidance on ethical reviews that meet stakeholder expectations. The ISDC will provide ongoing input to the development process to ensure consistency with international standards. Additionally, legitimacy includes recognition of the responsibilities that come with public funding. For CGIAR, minimum standards include demonstrating how prioritization is carried out to maximize the use of limited funds for the public good, as well as mechanisms to avoid misuse or abuse of funds. Planned ISDC work on prioritization aims to provide advice to the System Council on the potential consequences of various options for allocating funding at the System level.

**Effectiveness.** While CGIAR research must demonstrate a clear path to impact, its remit is not to deliver development outcomes directly. Hence meaningful engagement with partners who do deliver development outcomes is key. The ISDC has an ongoing workstream specifically on partnerships, and assessing partnership strategies is a key aspect of independent program review. Standards for such reviews include feedback from development partners on the degree of interest in and usefulness of the research outputs. Furthermore, with the transition to a unified CGIAR System, stronger internal partnerships are needed to ensure effective outcomes. ISDC's work on partnerships will thus include approaches to facilitate better within-CGIAR collaborations. The Standing Panel on Impact Assessment (SPIA), another CGIAR independent advisory workstream, generates evidence on the nature and extent of realized impacts across the broad range of CGIAR research investments, in addition to offering input into *ex ante* strategic planning. The ISDC will work with SPIA to ensure that research design and research quality support and complement impact assessments. It will

also consider the effectiveness of the enabling environment within which the research takes place.

At the System level, there is a need to ensure appropriate internal capacity to monitor and maintain high standards of research quality, although the specificity of the indicators associated with the standards for each element depends on the scale at which the frame of reference is being implemented.

## 4.4 The Frame of Reference in Evaluation

The CGIAR Advisory Services Shared Secretariat (CAS Secretariat) implements the CGIAR System's multi-year evaluation plan, among other functions. Through this evaluation function, the CAS Secretariat commissions and oversees programmatic and on-demand evaluations for use by funding partners, program management, and internal and external stakeholders. According to the CGIAR Evaluation Policy (2012) and guidelines in place (see IEA 2015 Guidance Notes),<sup>9</sup> and based on the OECD-DAC evaluation criteria with the addition of a Quality of Science criterion, evaluations of CGIAR research<sup>10</sup> employ six criteria: relevance, science quality, efficiency, effectiveness, impact, and sustainability.

Looking into the details, the present CGIAR evaluation criteria cross-reference with the QoR4D frame of reference's four key elements, as detailed in the following paragraphs.

To assess the QoR4D **relevance** element, evaluations consider the extent to which the objectives and design of research are consistent with external priorities and policies (e.g., those of beneficiary countries and partners), as well as with CGIAR SLOs, including the research Program's internal relevance—that is, the logic of its impact pathways—to the IDOs to which the research contributes. Assessment of relevance also covers the comparative advantage of the Program as an evolving condition, prioritization and use of core funding. In assessing relevance, evalua-

tions complement and build on ISDC's program and portfolio assessments.

Evaluation of the **scientific credibility** element addresses outputs, consisting mainly of published results and germplasm, as well as leadership, research staff, processes, and incentives for achieving and maintaining the high scientific credibility of those outputs. Assessing scientific credibility also includes, among other things, the track record of research teams, use of state-of-the-art research literature and methods, and novelty.

The element of **legitimacy** as defined by QoR4D is covered in Quality of Science, and dispersed through the relevance, sustainability and effectiveness evaluation criteria. Assessments of fairness and the ethical aspects of research implementation are also standard features in programmatic evaluation.

Evaluations cover **effectiveness** both by assessing, in an actual and forward-looking manner, Program theories of change—their plausibility, assumptions, and constraint analysis—and by assessing progress milestones, near-term achievements, and potential for scaling. Evaluating effectiveness incorporates aspects of the enabling environment: gender, partnerships, capacity development, and communications. Evaluations also use uptake and outcome studies when they are available, although these are usually considered under impact. The effectiveness criterion in CGIAR evaluation encompasses both research effectiveness, per the definition of this element in QoR4D, as well as program effectiveness—looking at progress and delivery, overall institutional, governance and managerial arrangements, management of partners, and M&E systems.

The QoR4D elements and the current CGIAR evaluation criteria are linked in many ways. Further elaboration of CGIAR evaluation policy and guidelines will continue to bring greater coherence and strengthen the scope and methodology for assessing the QoR4D elements through ongoing evaluations.

<sup>9</sup> See CAS Secretariat website: <https://cas.cgiar.org/evaluation/publications?title=&type=1668&year=All>.

<sup>10</sup> These include evaluations implemented by the Independent Evaluation Arrangement, in existence until December 2018.



## 4.5 The Frame of Reference in Oversight and Advice: CGIAR System Organization

In the Charter of the CGIAR System Organization,<sup>11</sup> the System Management Board (SMB) is charged with several aspects of confirming the System's business plans and with its annual scientific and outcome reporting at the aggregate portfolio level (Programs and Platforms). The SMB makes recommendations on such plans to the System Council, including recommendations on the strategic allocation of funds to support the portfolio. CGIAR's strategy for allocating and using funds is expected to comply with its performance management system and risk management framework. The SMB, supported by its implementing arm, the System Management Office, works towards enhancing the complementarity and effectiveness of the processes.

**Relevance.** The SMB is charged with making "recommendations to the System Council on strategic action to ensure results and continued relevancy of agricultural research for development." It uses as its guide the SRF and the agreed upon portfolio of Programs and Platforms. To maintain the relevance of the portfolio, it expects, over time, to use the outcomes of foresight studies (from the ISDC, Programs, and other sources, including funders' perceptions of emerging international issues). The SMB will consider and make recommendations on scientific and resource flexibility to address new challenges relevant to CGIAR.

**Scientific credibility.** The SMB depends largely upon Center and Program processes and periodic evaluations to ensure the scientific credibility of individual Program and Platform research. In a general way, it encourages and assesses the implementation of Center policies and Program performance through annual reporting. The challenge of maintaining scientific credibility is considered a key risk factor for CGIAR at large and is addressed at the level of the CGIAR System's risk management framework.

**Legitimacy.** The System Organization plays a key role in enhancing awareness within the System on topics such as gender inclusion in research and staffing, open access to CGIAR data, intellectual asset policy, and the establishment of transparent monitoring and evaluation frameworks, including support for communities of practice in these fields. SMB reviews of Program and Platform annual reports include consideration of the role of partners, an evolving view of CGIAR's comparative advantage, and recommendations to the System Council on the organization of CGIAR research.

**Effectiveness.** The SMB is responsible for bringing to the attention of the System Council ways to enhance CGIAR effectiveness and efficiency (including cost-efficiency) as opportunities arise—e.g., through evaluations, impact assessments, and its annual synthetic reviews of Program and budget performance.

<sup>11</sup> The CGIAR System Organization is composed of the System Management Board and the System Management Office.

## 5. IMPLICATIONS AND WAY FORWARD

The frame of reference is expected to be used as a tool to:

1. better implement agreed-upon strategies within the System to foster a culture that enables the highest standard of research;
2. give confidence to funding partners that there is a commitment to strengthening QoR4D in all aspects of CGIAR research.

Successful implementation will require CGIAR to strongly commit to adopting it at all levels of management and governance and to sharing the lessons learned during its implementation (e.g., how to handle trade-offs between the four QoR4D elements,

how to minimize cost of implementation, and how to recognize unintended consequences in specific circumstances). Earlier dialogues (such as the ISPC meeting in 2017) led to general agreement that the frame of reference should serve as a learning mechanism to improve the quality of research through its application at different levels and phases (from strategic planning, to Program implementation and monitoring, to evaluation and impact assessment). Thus there is no “one size fits all” metric. Appropriate indicators will always depend on context. When indicators are selected a priori and categorized under the four elements of this framework, they will serve as a powerful mechanism for ensuring the highest standards of AR4D. Such an approach will also minimize transaction costs.



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CGIAR Advisory Services (CAS) Secretariat  
Via dei Tre Denari, 472/a, Maccarese (Fiumicino), Italy  
tel: (39-06) 61181 - email: [isdc@cgiar.org](mailto:isdc@cgiar.org)  
<https://cas.cgiar.org/>