



Towards a Cohesive and Coherent 2022 – 2024 Investment Prospectus

ISDC Review of the Companion Document

18 November 2021

Background

The 13th meeting of the CGIAR System Council approved the 2022 – 2024 CGIAR Investment Prospectus. With this approval came the request of a CGIAR-authored Companion Document¹ (CD) that would detail the approach used to build a coherent and cohesive group of Initiatives to advance the 2030 Research and Innovation Strategy. System Council requested the Independent Science for Development Council (ISDC) to assess the CD concurrently during the ISDC external review of the initial 19 Initiative proposals (September 30 to November 18).

System Council tasked ISDC to review the CD based on the four criteria of external coherence, internal coherence, interdependencies, and management of funding uncertainties. In addition, ISDC included a question in each proposal review that asked *Does the Initiative align with the cohesion of the portfolio as described in the CD?* The assessment of the CD includes sections on CD strengths, overall considerations, detailed responses to each criterion, and the responses for each proposal review question (for the latter see Appendix A).

Companion Document Strengths

ISDC is aware of the enormous challenges that the new management and leadership teams of One CGIAR are experiencing and the limited time they had to establish a new *modus operandi*. The CD provides strong evidence that the new structure is now operational and that it has a high chance of delivering the new mission. ISDC hopes the review will accelerate the transition towards a science-based innovation culture across One CGIAR.

The CD is a well-considered and an important complementary resource to the 2022 – 2024 CGIAR Investment Prospectus that outlines the context and framework used in Initiative codesign. The CD addresses the four criteria requested by System Council and focuses on the operational aspects of the Initiative development process. The CD further outlines the mechanisms that will be used to adaptively manage the portfolio. ISDC acknowledges that the more than two-year consultation process for the Prospectus was given high priority during considerable timing pressure and in a COVID-affected environment.

ISDC appreciates and compliments the Executive Management Team and colleagues for establishing a nested Theories of Change (ToCs) approach that logically links the overarching CGIAR-level ToCs, which cascade to the three Action Areas and ultimately to the individual Initiatives and their work packages. The long-term 2030 vision for each Initiative, alongside the three-year work packages, facilitates alignment of the Initiatives with the 2030 Research and Innovation Strategy. Although evidence of such alignment is missing from the CD, this may be provided in more detail within the 32 Initiative proposals.² The coherence and cohesion in Initiative delivery demonstrates the new One CGIAR governance structure in action. This is instrumental for stakeholders not closely involved in the reform process to provide evidence of new management of complex problems. A coherent and

¹ CGIAR. (8 October 2021). [Companion Document to the 2022-2024 CGIAR Investment Prospectus](#).

² At the time of this assessment, only 19 Initiative proposals were reviewed.

cohesive portfolio helps to build confidence that the new structure will be able to better deliver on the CGIAR mission.

Overall, the financial planning at one- and three-year time scales are sensible. The principle of each Initiative being considered for at least some inception funding to explore the potential is practical and should be supported. The ISDC endorsement of this principle is based on the assumption that the portfolio of Initiatives was constructed to ensure One CGIAR's delivery on all key strategic objectives and that each of the 32 Initiatives makes important co-contributions to others and are therefore essential for their success (i.e., the issue of interdependencies). The goal should be to ensure that outputs and outcomes contribute to a cohesive One CGIAR portfolio with a balance between short- and long-term investments. ISDC supports the idea of seed funding based on the stated goal and assumption. However, after the seed stage, ISDC urges a curated portfolio approach; this means to avoid funding distribution simply to achieve parity across the 32 Initiatives.

The reasoning behind Regional Integrated Initiatives (RIIs) is well articulated and highlights the need for co-ownership, positioning CGIAR as innovation brokers—not always the originator of innovations—and “demand creation and solution feedback loops.” Using prototyping with a focus on planetary boundaries is a real strength.

The CD includes important processes and principles that will drive the engagement with external partners. Although much of this is still aspirational and a work in progress, ISDC appreciates its inclusion. Thoughtful and inclusive preparation of a Partnerships Engagement Framework deserves strong support and will be an essential deliverable during the inception phase of Initiatives. This will require sustained efforts and investments.

Overall Considerations

The following includes overarching considerations grouped by comparative advantage, partnerships, priority setting and funding, coordination and management, and innovation in the CD across the four assessment criteria.

Comparative Advantage

While the emphasis on process is appropriate, the CD misses the more visionary aspects of the portfolio and a narrative explaining why CGIAR is uniquely positioned to lead these 32 Initiatives. A clearly stated response to *why CGIAR* is ideally suited to deliver on the aspirations of the 2030 Research and Innovation Strategy would have been helpful in framing a clear and evidence-based statement of CGIAR comparative advantage. ISDC underscores an urgent need to develop a systemwide, methodological approach to the identification and articulation of comparative advantage.

The need for a better understanding of comparative advantage is evident from the CD and the individual Initiative proposals. The CD does not articulate *how* One CGIAR will ensure that the Initiatives proposed speak to the comparative advantage of CGIAR vis-a-vis other country, regional, and global players. Part of the 2022 ISDC workplan is to advise System Council and other stakeholders on a systemwide approach to define CGIAR's comparative advantage.

A comparative advantage systemwide approach is particularly important in new areas of research where CGIAR might not yet have a comparative advantage, but decides for legitimate, strategic reasons to invest and engage. A statement, answering "*Why CGIAR?*" is imperative for each Initiative, and especially for new CGIAR research topics where potentially unfamiliar partnerships must be explored and developed.

Partnerships

Without having the Partnerships Engagement Framework in place, assessment of how partnerships are *transparently* identified, defined, and managed is challenging. The CD does not elaborate on how partnerships will be initiated, monitored, or evaluated. Without adequate relationship mapping across all 32 Initiatives, a comprehensive consideration of overlaps, synergies, and co-dependencies is absent. Further elaboration on partnership mechanisms for interaction and codelivery of outputs, outcomes, and impacts would be helpful. To achieve the 2030 collective global targets in the Results Framework Table, scaling partners will be vital. Additional explanation of how scaling partners will be engaged, and the approaches needed to build their capacity is desirable.

The CD emphasizes that “purposeful partnership” building and stewardship will be instrumental to active, adaptive management of external coherence across the CGIAR portfolio of research and investment. An important consideration is *inclusive* and *functional* partnerships to address the Impact Areas and unreachable populations. This includes partnerships that consider gender, diversity, and inclusion (GDI), early-career scientists, and farmers. Partnership elaboration at all levels is warranted.

The Advisory Services Shared Secretariat external evaluation CRP reports and Synthesis emphasized partnership recommendations and learning that should be incorporated across the portfolio and strategic planning. The CD lacks details on how private-sector agents will be engaged as partners and how these engagements will be legitimately managed.³ One recommendation from the Synthesis that should be emphasized is: “*The CRPs have focused primarily on government, community, and ARI partnerships, but engaging the private sector will be critical for scaling innovations. Where CRPs did work with the private sector to extend innovations, there was no evidence of a private sector engagement strategy or analysis of the effectiveness and lessons learned from these efforts.*”⁴ The CD does not outline how this recommendation will be strategically implemented. Partnership development requires relationship management and CGIAR staff will need capacity development to ensure private-sector partnership success.

Priority Setting and Funding

The criteria for priority setting are outlined in item 19 but lack specificity that would allow quantitative and qualitative priority assessments. The CD also lacks a contingency plan for uncertainties that would allow CGIAR to be flexible, employ more novel strategic approaches, and work closely with existing and potential funders. Worth noting is this CD review only includes insight of the initial 19 Initiative proposals. While Figure 3 (p. 6) seeks to illustrate the interlinkages across the 19 Initiatives, without an interpretation these linkages appear random. Further, any interlinkages with the remaining 13 Initiatives that have not yet been reviewed are missing. The network analysis provided in Figure 4 (“Initiative Partner Network” p. 13) and Figure 8 (“Indicative Scaling Readiness metrics including shared Innovation Package plan” p. 21) only make sense *if* and *when* the entire portfolio is included. Hence, ISDC strongly recommends mapping the substantive priorities for short- and long-term research across all 32 Initiatives, with a clear process for priority setting and review.

The CD presents the need for revision of some Initiatives depending on funders’ preference and ISDC feedback. Except for inception funding for the Initiatives to start in 2022, the process for revisions is

³ Legitimacy means that the research process is fair and ethical, and perceived as such. This encompasses the ethical and equitable representation of all involved and consideration of interests and perspectives of intended users. For full definition, please refer to the [Quality of Research for Development in the CGIAR Context](#) (2020).

⁴ CAS Secretariat (CGIAR Advisory Services Shared Secretariat). (2021). [Synthesis of Learning from a Decade of CGIAR Research Programs](#). Rome: CAS Secretariat Evaluation Function (p. 16).

not detailed (especially the *how*, *when*, and *where*). Notably, will revisions be written during Initiative startup and how will these modifications be shared publicly?

Except for item 73, the CD is silent on how pooled-funded Initiatives will be effectively integrated with activities funded from other sources. While details are limited, section 4.1 outlines the Integrated Results Framework and suggests a potential solution to integrate pooled and non-pooled funded activities into a comprehensive portfolio. Crop-by-region combination priority must include climate adaptation and mitigation and environmental health and biodiversity. This is in addition to the mentioned entries and alignment with recommendations from the Crops to End Hunger Initiative. The efforts cited are a useful and necessary start. ISDC recommends a dramatic expansion and/or clear record of the thought processes surrounding strategic cohesion across all CGIAR work, no matter the funding source.

Coordination and Management

The Impact Area Platforms will have a fundamental role, providing the imperative cross-cutting collaboration and communication across the portfolio. Their purpose is clearly outlined: they are there to support Initiatives rather than to compete. While the Platforms fill a need, staffing requirements and skillsets are unclear: how will these Platforms achieve their mandate and how will they work with Science Groups, Regional Directors, and the portfolio performance management team? Does CGIAR have the necessary social scientists that will be needed for these Impact Area Platforms to succeed?

Innovation

“Innovation” is a common theme throughout the CD and, in fact, all CGIAR documents. In many instances, innovation is used synonymously with terms such as “technology” or “research outputs.” The liberal use of the term degrades its meaning and while CGIAR has defined what innovation means to the System,⁵ more clarity on what really constitutes innovation and what an innovation culture entails is urgently needed. A better understanding of the mix of incremental, breakthrough, and transformational innovations that are envisaged within and across Initiatives would provide clarity and help with portfolio risk management (see ISDC’s Innovation Brief prepared for the 14th meeting of System Council for associated recommendations on the topic).

Item 22 addresses the bundling of innovations by linking the technical aspects to policies, while item 30a explicitly states the need for creating space for new research without degrading areas of existing strength. Both, bundling and balancing strength with novelty, are important mechanisms to ensure that innovations lead to impact. This also links with the concept of a “transfer marketplace” for priority assets (golden eggs; item 46), which is an innovative institutional mechanism that should be developed further.

The Four Criteria and their Assessments

This section provides detailed responses to the Systems Council assessment criteria of external coherence, internal coherence, interdependencies, and management of funding uncertainties.

⁵ CGIAR defined innovations as, “new ideas, products, services and solutions capable of facilitating impact through innovation systems involving multiple partners and enablers” ([2030 Research and Innovation Strategy](#), 2020).

External Coherence

*How will CGIAR's **core research for development competencies** be deployed across the portfolio in the context of other actors including complementarity, harmonization, and coordination with key geographic or thematic areas? Is it clear which areas CGIAR should lead and where they should become partners to develop new competencies?*

Recommendation: Map CGIAR's comparative advantage with country, regional, and global players that may be partners or competitors. Elaborate on how the proposed Initiatives will seek complementarity with efforts of other research institutions, or how One CGIAR seeks to harmonize efforts by a range of global players.

One CGIAR's Initiatives were informed by several well-coordinated and timely inputs from a range of consultations with the Investment Advisory Groups (IAGs) and Transition Advisory Groups (TAGs). Extensive regional, national, and stakeholder consultations helped gauge demand for research proposed and identified research, demand, and scaling partnerships. Further, the principle of triangulation (use of global evidence base, stakeholder demands, and investor preferences), to arrive at proposed Initiatives and partnerships appears robust. However, the CD does not elaborate on how external coherence will be ensured across geographies and what the balance of these efforts would be across the RIIs, nor how to manage external coherence on an ongoing basis. The coordination mechanisms in place—the Regional Directors, Science Directors, and Impact Area Platforms—generally appear sound for ensuring regional and thematic external coherence.

While the CD articulates key mechanisms in place to identify innovation, demand, and scaling partners, it does not outline how One CGIAR will ensure that the Initiatives speak to the comparative advantage of the CGIAR vis-a-vis other country, regional, and global players. The CD does not elaborate on how the proposed Initiatives will seek complementarity with efforts of other research institutions, or how One CGIAR seeks to harmonize efforts across a range of global players, especially in new research areas for CGIAR. There is no clearly articulated strategy that outlines an approach to partnerships to achieve external coherence. There is also little reference to any desirable engagements with the external academic world. Considering how One CGIAR might influence global research efforts and how such efforts in turn could benefit the One CGIAR mission are still lacking.

The current articulation of partnerships presumes, for the most part, that One CGIAR has all the needed scientific and academic competencies and that partnerships are needed to ensure demand and scaling of the “innovations” identified. While this might be the case in some instances where CGIAR has evidenced comparative advantages, it is rarely true in new areas of research that form a key plank of the new 2030 Research and Innovation Strategy and in which CGIAR is not the lead actor. This should be acknowledged and inform the emerging strategy for recruitment and capacity building.

The CD does not outline how the Initiatives might act as global convenors, enablers, and facilitators of science to practice. It is possible that the Partnerships Engagement Framework (yet to be launched) will address the key issue of One CGIAR's positionality, comparative advantage, and its role in fostering global science for development. Hopefully this would move beyond a narrow, transactional perspective that views such engagement purely as a means towards achieving CGIAR's objectives, which is necessary but not sufficient.

Further, what mechanism(s) will be established to ensure external coherence? Will these be Impact Area Platforms, which are networks to facilitate exchange with CGIAR? Will the Platforms' role be expanded to assurance of external coherence and its monitoring? The CD does not expand on

monitoring and evaluating partnerships, although several Initiatives include some aspects. These details will presumably be included in the Partnerships Engagement Framework.

Internal Coherence

*Does the CD demonstrate internal cohesion through a set of effective **relationships and synergies** among the portfolio's constituent parts? Is there evidence of a clear focus on coordinated management of various partnerships that facilitate **connectivity between Initiatives, themes, and regions**? Is this aligned with the CGIAR's Performance and Results Management Framework and underpinned by a unified Theory of Change?*

Recommendation: Explore opportunities to detail how leadership and teams among the Science Groups, Regional Directors, and Impact Areas will work together and where the authority lies to avoid unnecessary transaction costs associated with complex management structures. Responsibilities and authority need to be well aligned and lines of authority and responsibility should be clarified.

The detailed engagement among key players and their extensive discussions was designed to deliver an agreed, aligned, and prioritized portfolio of activities that address the five Impact Areas. Such engagement is intended to avoid duplication, resolve boundary issues, and prevent silos. The process and outcomes of the extensive consultations resulted in a logical and well-designed high-level framework with nested ToCs that clearly indicate how the Initiatives should interact at various levels of the portfolio. The ToCs also are aligned with the Performance and Results Management Framework with three types of results (outputs, outcomes, and impacts) and acknowledgement that CGIAR has direct control only for outputs.

Figure 3 (p. 6) attempts to show the linkages between the first 19 Initiatives. Some of the Initiatives are designed to be cross-cutting and -thematic (e.g., Harnessing Digital Technologies for Timely Decision-Making across Food, Land, and Water Systems). However, without an interpretation the linkages appear unintentional. Figure 3 does not contribute to a better understanding of internal coherence. The linkages are more easily seen and understood from the individual Initiative ToCs. The overall cohesion/coherence of the portfolio will need further assessment after the second set of Initiatives have been reviewed. Management mechanisms are described for the operational oversight of developing and maintaining internal coherence as well as avoiding duplication or overlap. These mechanisms involve Science Group staff and their communication with Regional Directors and the portfolio performance management team.

The Initiatives will be managed operationally through the various management teams to “build in” cohesion, with the three Science Group Directors expected to play a key role in oversight working closely together. Impact Area Platforms are the main mechanism to drive internal coherence. Membership of the Impact Area Platforms and the portfolio performance management team will be critical but these details and how they will work with Science Groups and Regional Directors are missing. The CD simply states that the Impact Area Platforms members will be drawn from all divisions as appropriate and will form “*networks within the system, rather than stand-alone dimensions of a matrix structure.*”

Clarity also is lacking on how the various directors (Science Groups, Regional Directors, and Impact Areas) will work together and where the authority lies. Clarification of these details would be useful. For example, a diagram showing organizational structure and reporting lines, including management and communication among the groups, would be beneficial. This complex management structure may generate a lot of additional transaction costs (large numbers of meetings, negotiations, etc.) and may, therefore, cause delays and impact the effectiveness of the planned research over the

three-year cycle. Balancing operational imperatives with issues of probity and effectiveness will be an ongoing challenge for all leadership teams. Hence, it will be paramount to align responsibilities for delivery with the necessary authorities for decision-making. Many science-based organizations suffer from an uneven distribution of responsibility and authority, with some sections having responsibility without authority, while others having authority without responsibility. Such an uneven distribution inhibits the development of an innovation culture.

A critical area identified to benefit from the internal cohesion generated through Initiatives and Platforms is capacity development. However, the CD is silent on the type of approaches needed to develop and retain capacity within CGIAR. Capacity development is simply presented as something that will happen rather than identifying how Initiatives and Platforms could proactively create opportunities for capacity development. In fact, several of the Initiative reviews recommended improvements on the Quality of Research for Development criterion 14 (“Capacity building within project teams, partners, and stakeholders captured in capacity development plan”).

There are some positive examples that will foster internal coherence while lowering transaction costs. For instance, it is encouraging to read that Genebanks (item 17) might be approved on a continuous basis. Another highlight is that mechanisms are in place to carry forward “golden egg” assets from the CRPs that will help to maintain effectiveness over the next three years.

Interdependencies

Does the CD articulate a conceptionally rational and effective approach to manage interdependencies between the Initiatives? Are there any significant areas of overlap or duplication of effort? How will these be identified, managed, or resolved?

Recommendation: Carefully review the six RII proposals and the CD to ensure no duplication exists with the Global Thematic Initiatives. This review should include a strategy on how country offices will work with RIIs.

The vision of interconnected thematic and regionally integrated Initiatives is generally sound. Impact Area Platforms and RIIs provide mechanisms to address interdependencies: for capturing complementarities among Initiatives, minimizing unnecessary duplication of effort, identifying, and closing key gaps in the portfolio, and helping with effective data and partnership stewardship. While the vision articulated in the CD is generally thorough, correspondence with the RII proposals is somewhat wanting, perhaps because the CD was developed in parallel to the first two of the RII proposals. Little detail is provided beyond a partial page (section 3.2) in the CD on the operationalization of the Impact Area Platforms.

As reflected in Figure 5 (p. 14), RIIs are central to CGIAR delivery of research for development. The RIIs seem natural hubs for both trade-offs and foresight analyses at country and regional scale, for leading partnership management and data stewardship with stakeholders within the regions. The two RII proposals received thus far (for South Asia and East and Southern Africa) seem uneven in their fidelity to the vision articulated in the CD. At least one seems to propose considerable field- and landscape-scale research apart from the Global Thematic Initiatives. That seems likely to invite duplication of efforts and internal competition that could prove wasteful.

Country and regional offices are the natural locus for convening stakeholders to identify socio-technical innovation bundles appropriate to the policy, institutional, and agri-environmental contexts. The CD is largely silent about this role. RIIs and country offices seem best conceptualized as platforms (and the continuous development of better platforms) for the assembly of innovations developed by the Global Thematic Initiatives and external partners to achieve impacts, rather than

as the originators of new research work packages themselves. ISDC sees this vision in the CD, but not entirely in the two RII proposals reviewed so far, so some further coordination work seems necessary.

The CD is also silent on how country offices will work with RIIs. This gap needs attention. The subsidiarity principle raised in item 57 might guide the division of labor among RIIs and country offices. CGIAR must recognize that this principle entails not just devolving authority to those closest to partners, but also to the lowest spatial scale for relevant external entities to become internal.

Also unclear is how the RIIs will coordinate around global challenges (e.g., climate change, inclusion of historically underrepresented groups, and interregional migration) with which most or all must grapple.

The details of how the Impact Area Platforms will implement this vision is largely absent. Impact Area Platforms "will be networks within the system," following the communities of practice model that CGIAR has used with some success already. These seem like coordinating networks. But where gaps or overlaps emerge through dialogue within the Impact Area Platforms network, who resolves those issues? Lines of authority and responsibility need clearer definition. It seems natural for the Foresight Global Thematic Initiative to play a key role in informing Impact Area Platforms, but that is not raised in the CD. The need to continuously assess trade-offs across Impact Areas should be addressed.

The Partnerships Engagement Framework is not yet available. The principle of subsidiarity should apply to partner and data management. In many countries, national statistical offices have rapidly expanding capacity and generate extensive, reasonably high-quality data (e.g., nationally representative household surveys, many of them longitudinal, and streams of high-resolution Earth Observation data from remote sensing platforms) that CGIAR must be alert to and then leverage effectively.

Integration and coordination will be an ongoing process. The Impact Area Platforms and RIIs have the potential to be efficient, effective devices for enhancing interconnectedness and avoiding wasteful duplication. Getting the details of these mechanisms right will require ongoing work.

The CD also lacks vision and information on how CGIAR will invest in obtaining causal evidence on specific targets, mentioned in item 80. Research designs and data collection to obtain such credible, causal evidence will need to be built in from the start. Items 85b and c state that CGIAR, at the portfolio level, will make investments in:

- large data collection to measure the reach and impact of CGIAR innovations; and
- independent evaluation and impact assessment designed as integral part of research to causally test impacts.

However, no information is provided on where and how this will be operationalized. Furthermore, the CD remains silent on what resources will be allocated and how CGIAR will assure that this work will use frontier research methods to meet the required standards of rigor (a real concern given the long-time erosion of social science research capacity in many parts of CGIAR).

Management of Funding Uncertainties

Does the CD clearly explain the approach to prioritization? How will funding be allocated? Does the Executive Management Team have a risk management approach in place to allocate limited funds without risking the coherence of the overall portfolio should some Initiatives not get funded?

Management of Funding Uncertainties

Recommendation: The CD needs to map the CGIAR's substantive priorities for short- and long-term research, with a clear process for priority setting and review that is evidence based.

The CD broadly explains how Initiatives will be prioritized based on overall delivery of the 2030 Research and Innovation Strategy. The CD acknowledges that some Initiatives will receive more and others less priority and requests that Initiative proposals be developed in accordance. The CD states that new and more explorative Initiatives will be allocated smaller initial inceptions. The request for all Initiatives to receive at least some seed funding seems reasonable, if the Initiatives meet or exceed the minimum quality standards.

The CD, however, does not detail the approach to prioritization nor is there an articulation of risk management procedures or a plan to fill gaps. The CD states that the Executive Management Team's risk management approach will detail and ensure that a coherent portfolio will be maintained even if some Initiatives will not get funded. The CD is silent on details of identifying, assessing, and prioritizing of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unforeseen events or emerging risks.

While there is a recognition that financial resources may be insufficient to accommodate all requirements, there are no alternative strategies identified and the CD lacks risk management and scenario planning. Since the Initiatives are not alike, the risk management approach and plan must be tailored to the scope and complexity of individual Initiatives. The CD also lacks a contingency plan for the more difficult uncertainties to allow CGIAR to work more flexibly, employ more novel strategic approaches, and work more closely with existing and potential funders.

ISDC recommends mapping CGIAR's substantive priorities for short- and long-term research, with a clear process for priority setting and review that is evidence based. This will be essential for CGIAR to secure a solid base of funding for a coherent program of research for development. A clear articulation of how this will be achieved is still lacking.

An implicit priority is to address impacts of climate change on agricultural production, aligned with CGIAR's mission statement that focuses on systems in a climate crisis. Some Initiative proposals are more closely aligned with this goal than others. However, agreeing on any single goal as a priority seems to be difficult when considering diverging priorities in the regional and country contexts and within current CGIAR governance processes. A prioritization approach that accommodates multiple strategic goals, including climate impacts, may be a more appropriate prioritization architecture. Furthermore, without a solid base of funding, any coherence is likely to disintegrate, and centers and researchers will be left to chase bilateral support and resources, including people.

1 **Appendix A: Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document? Responses by First 19 Initiative Proposal⁶**
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Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Accelerated Breeding (ABI): Meeting Farmers' Needs with Nutritious, Climate-Resilient Crops	<p>The proposal clearly describes the interactions and dependencies between the work proposed in ABI work packages and the other Genetic Innovation Initiatives with good internal coherence and seemingly little duplication. Codelivery of innovations will be achieved particularly with Market Intelligence and Product Profiling, N4ETTSS, and SeEdQUAL. The interactions with Genebanks to draw on natural genetic diversity is less clear. The envisaged strengthened CGIAR-NARES-SME breeding networks will use CGIAR's comparative advantage and should strengthen breeding capacity in NARES. However, training and capacity building in new breeding technologies is crucial and the CD should include further details of how this will be achieved. Impact could be achieved across the developing world, but it is not clear which regions and crops will be prioritized by ABI. The descriptions alternate between global and SSA/South Asia, leading to a lack of clarity. In general, the Initiative supports the wider portfolio aims and spheres of impact, i.e., providing affordable, nutritious crops that are climate and disease resilient and that will contribute to poverty reduction and gender equity.</p>
ClimBeR Building Systemic Resilience Against Climate Variability and Extremes	<p>The Initiative addresses strongly the first four Impacts Areas of One CGIAR and partially the fifth: 1) Nutrition, Health, and Food Security, 2) Poverty Reduction, Livelihoods, and Jobs, 3) Gender Equality, Youth, and Social Inclusion, 4) Climate Adaptation and Mitigation, and 5) Environmental Health and Biodiversity. With climate-smart agriculture and diversification, ClimBeR will support strongly Impact Areas 3 and 4, and contribute significantly to Impact Area 1, 2, and 5. Capacity, innovation, and policy-oriented actions have been carefully identified with their priority setting and the design of the project.</p>
Conservation and Use of Genetic Resources (Genebanks) Initiative	<p>From the Genebanks proposal it is not clear how the Initiative will interact with any of the six RIIs.</p> <p>The Genetic Innovation (GI) Action Area includes: Genebanks; Market Intelligence and Product Profiling; Network 4 Enabling Tools, Technologies, and Shared Services (N4ETTSS); Accelerated Breeding (ABI); Delivering Genetic Gains in Farmers' Fields (SeEdQUAL). Genebanks will also link closely to Plant Health and Rapid Response to Protect Food Security and Livelihoods, which is within the Resilient Agrifood Systems Action Area. Examples of the expected flows of information, knowledge, and products between the different Initiatives would be informative and enable a deeper understanding of the expected relationships. Current visuals such the CD's Figure 3 (p. 6) just shows connecting lines that do not unpack or share any substance regarding these expected connections.</p>

⁶ The responses received light, technical editing for understanding and clarity.

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Conservation and Use of Genetic Resources (Genebanks) Initiative	<p>The stated focus on faster replacement rates and varietal turnover and adoption of new varieties is not necessarily aligned with the GI aim of addressing the challenge of the limited and decreasing biodiversity underpinning our crop and food systems, nor does it appear to sufficiently recognize the importance of context-specificity and indigenous knowledge. Diversity is an important element of resilience and how Genebanks, the GI Action Area, and One CGIAR will support messaging and action around the importance of diversity in fields and diets is not clear. The focus in the current text on just a few very specific traits in a limited range of crops appears contradictory to this.</p> <p>The crucial role of co-created new partnership models is flagged in the CD but does not permeate sufficiently through the continuum of the six GI Initiatives to be integral within Genebanks. What important partnership- and behavior-related outcome changes can Genebanks influence, and how?</p> <p>The Genebanks proposal does not provide sufficient granularity on activity details to enable meaningful Monitoring, Evaluation, Learning (MEL). That in turn prevents understanding of planned methods or opportunities for cohesion between proposals, and thus thwarts MEL of the cohesion of the portfolio. The details are necessary and important. Currently, the only Genebanks indicator listed in the Results Framework Table (CD's Annex 1) is <i>Gli 1.1 Number of accessions data used at various levels of the breeding pipeline (level of use: used in crosses, backcrosses, incorporated in elite germplasm)</i>. More attention to improved processes and efficiencies, and to partnership and capacity-related metrics would be beneficial.</p>
Excellence in Agronomy for Sustainable Intensification and Climate Change Adaptation (EiA)	<p>Pursuant with principles in the CD, EiA builds on existing research expertise with a strong presence in high priority geographies. EiA proposes strong linkages with scaling partners that have a comparative advantage in working with farmers and rigorous procedures for establishing new collaborations. Significant collaborations with CGIAR's global, system, and regional Initiatives are proposed, as are modalities for these collaborations. EiA plans to use standard protocols for data management and Monitoring, Evaluation, Learning (MEL) activities to facilitate these collaborations. Connections with Impact Area Platforms need greater elaboration. Funding uncertainty was identified as a risk but plans for addressing it are inadequate.</p>
Livestock, Climate and System Resilience (LCSR)	<p>Internal coherence: The efforts to align LCSR with the portfolio are good: the narrative is fairly clear, and some aspects are a definite step forward from previous practices. The Initiative's ToC aligns well with the Resilient Agricultural Food Systems ToC. Do projected benefits in LCSR contribute sufficiently to overall CGIAR targets? For example, projected 2030 benefits in the Poverty Impact Area of LCSR are 2.96 million people out of an overall CGIAR target in the CD of 500 million people.</p> <p>Research questions and methods as described in the work packages provide confidence in the science quality proposed but it is difficult to put this in the context of the overall CD because it uses more rudimentary indicators such as numbers of peer-reviewed papers and altimetric scores.</p>

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Livestock, Climate and System Resilience (LCSR)	External coherence: Country prioritization is logically argued and is consistent with the approaches set out in the CD. Partnerships to achieve impact are a key element in the CD but this area is a little vague in the LCSR proposal. This is in part due to proposal word limit but approaches to scaling through national commitment could be more clearly articulated.
Market Intelligence and Product Profiling	The Initiative certainly aligns with the portfolio as it aims to ensure that improved varieties contribute to productivity gains, but also generate a well-balanced portfolio of impacts across all five Impact Areas. It also aligns with the rigorous use of Monitoring, Evaluation, Learning and Impact Assessment (MELIA) for similar impacts. In addition, the leadership plans are sound and in keeping with the aim of identifying bottlenecks, designing a scaling strategy, and monitoring change for use of innovations. It is important to recognize that change is hard.
Mitigation and Transformation Initiative for GHG reductions of Agrifood systems Related Emissions (MITIGATE+)	<p>External coherence (country, regional, global levels): This is covered reasonably well, although some reviewers questioned the choice of and criteria used to select the seven countries in MITIGATE+ (Table 1, Initiative proposal).</p> <p>Internal coherence including Impact Area Platforms: The proposal has good documentation of the expected amount of CO₂-e averted and the number of people benefitting from climate resilient innovations. While the descriptions of the work packages are clearly laid out, the linkages between the research plan and main proposed scientific methods are not evident: this leads to a lack of continuity between the research plan, scientific methods, and outputs. This could be simply improved with consistent titles and subtitles for example.</p> <p>Interdependencies between other thematic/regional Initiatives: These are well mapped (linkage with ClimBeR, NEXUS Gains, SAPLING, LCSR, EiA, SHiFT, etc.) although additional detail on how constituent parts of MITIGATE+ depend on other Initiatives is required. Improved clarity regarding the linkages between work packages, methods and End-of-Initiative outcomes are also required.</p> <p>Management of funding uncertainties: This seems to be completely absent from the proposal. Aside from total budgets in section 10.1, no other information on the budget is apparent and appears to be a shortcoming in the proposal template design. More detail of intended management (including metrics) is required.</p> <p>Integrated results framework at Initiative, Action Area, and CGIAR Levels: In general, this is well covered.</p> <p>Measurement and reporting at multiple levels and timeframes: The management plan and Gantt table in section 7.2 contains annual “pause and reflect” workshops, but how this reflection will be subsequently acted upon is unclear. Ex-post impact assessments of the work packages are well covered in the proposal, but ex-post assessments of the monitoring and evaluation (and how this assessment will be used to refine management going forwards) could be more transparent. The linkage of management to the work packages could be better detailed (metrics, aim, achievability and timing).</p>

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
<p>National Policies and Strategies for Food, Land and Water Systems Transformation (NPS)</p>	<p>With its strong focus on national-level policies and strategies, NPS has a critical role in the CGIAR portfolio. The proposal does a good job of identifying the main Initiatives and offices (RII) with which it will need to coordinate. What is less clear—from both the NPS proposal and the CD—is how the country-level interdependencies will be managed, practically. For example:</p> <p>In its six focus countries, will NPS take the lead on coordinating ALL national policy and strategy work for Initiatives with a policy element? For example, on p. 11, NPS highlights opportunities to examine the experiences with safety net programs in Egypt and Kenya. Although micronutrient/dietary diversity is not a focus of NPS, presumably another Initiative will tackle this. How would the work of (potentially) multiple Initiatives targeting safety net programs be coordinated at the country level?</p> <p>NPS focuses on national policies and strategies but will have a specific policy focus in several pre-defined areas (Table 1, p. 10.) NPS will analyze trade-offs among policy options within those specific areas. But at country level, how/who will support governments in undertaking a wider-lens meta-analysis to show costs, benefits, trade-offs among investments across multiple sectors (per the charge of UNFSS, and to inform national ag transformation strategies)? And how would those results be reflected in NPS and other Initiatives? This seems like a step that must be taken before countries can decide on the policy priorities implied by NPS (and other “targeted” policy Initiatives).</p>
<p>Network 4 Enabling Tools, Technologies, and Shared Services (N4ETTSS)</p>	<p>The Initiative aligns well with the cohesion of the portfolio, as exemplified by the following (among the 92 items of the CD):</p> <p>The Initiative builds on a clear consultation process, including regional advisory forums and structured regional consultation in Initiative design. The codesign process is very well described, there’s a participatory design process to gather input from various stakeholders (including NARES breeding platforms).</p> <p>The Initiative is fitting with the CGIAR’s Research and Innovation Strategy and is a high priority area aligned with funders priorities.</p> <p>Through the implementation of novel methods to accelerate the improvement of crops, N4ETTSS has explicit connections with other Genetic Innovation Initiatives, such as Market intelligence and product profiling, Genebanks, and ABI. Thus, N4ETTSS impacts will initially occur through ABI, with ABI’s success influenced by Market Intelligence and Product Profiling, Genebanks, and SeEdQUAL.</p> <p>From a comparative advantage, CGIAR has a presence in and knowledge of the many countries where it works and has institutional links, combined with a solid scientific reputation. These solid and trusted relationships will be leveraged to promote the adoption of tools, technologies, and shared services by NARES.</p> <p>Although the timeframe for Initiatives is three years, N4ETTSS has built its ToC that identifies plausible pathways to generate impact over a 10-year period. This recognizes the longer timeframes needed for achieving meaningful impact.</p>

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
NEXUS Gains – Realizing Multiple Benefits Across Water, Energy, Food and Ecosystems (Forests, Biodiversity)	<p>The problem statement aligns effectively with the System Transformation Action Area priorities in the CGIAR Investment Prospectus, specifically as a “broader, integrating effort to tackle climate change, NRM, and nutrition/health,” to “identify place-based programs in priority agroecologies,” and to “address contextual food-land-water challenges.” These trace through convincingly to impact on Action Areas. However, a clear mechanism to make an effective regional impact is not clear, regional inter-country governance is almost unmentioned.</p>
Plant Health and Rapid Response to Protect Food Security and Livelihoods	<p>The problem statement aligns effectively with the System Transformation Action Area priorities in the CGIAR Investment Prospectus, specifically as a “broader, integrating effort to tackle climate change, NRM, and nutrition/health,” to “identify place-based programs in priority agroecologies,” and to “address contextual food-land-water challenges.” These trace through convincingly to impact on Action Areas. However, a clear mechanism to make an effective regional impact is not clear, regional inter-country governance is almost unmentioned.</p> <p>Cohesion of the CRP portfolio was an important aspiration during Phase II. However, the level of cohesion was limited due to lack of alignment among individual CRP priorities. Lessons must be learned from this to inform One CGIAR. CD’s Figure 3 (p. 6) shows how the planned Initiatives will link together for cohesion. Plant Health and Rapid Response to Protect Food Security and Livelihoods Initiative has close links with Genebanks, SeEdQual, ABI, EiA and Market Intelligence and Product Profiling but does not appear to be linked to One Health (for mycotoxins) and MITIGATE+ (IDPM strategies). As priorities in different Initiatives will be decided by different teams how will cohesion be achieved? (Note: while there is no mention of mycotoxins in One Health, yet this was an important part of A4NH).</p> <p>A related concern is the multitude of links with the RIIs for scaling innovations. There will be considerable transaction costs and competition among all Initiatives. How will priorities be decided and what will happen to the lower priority innovations? The management structure detailed in the CD is very complex and most importantly, lacks clear hierarchy or lines of authority which could lead to delays in making decisions. There is a need for clear prioritization principles and guidelines as well as designated independent arbiter to make final decisions. Portfolio integration is a high priority for One CGIAR.</p>
Protecting Human Health through a One Health Approach	<p>This Initiative clearly aligns with the cohesion of the portfolio as part of the Resilient Agrifood Systems Action Area. Linkages to other projects in livestock production, markets, gender, and peri-urban agriculture are noted in the connections diagram in the CD. This Initiative will clearly contribute to collective global targets in health and food security and to all the Action Area outcomes (both shared and specific) for Resilient Agrifood Systems.</p>

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Rethinking Food Markets and Value Chains for Inclusion and Sustainability	<p>The Initiative aligns very well with the cohesion of the portfolio described in the CD. It sticks closely to the integrated results framework, but in some sense, this comes at the expense of precision and informational contents of the indicators for outcomes (see full review). The Initiative remains at a level of generality that is consistent with the portfolio but doesn't allow specifying strategies and channels of impact. Strong links to multiple other global Initiatives and to regional integration Initiatives are evident. This Initiative could spearhead greater CGIAR engagement with the private sector, which seems strategically essential.</p>
SeEdQUAL: Delivering Genetic Gains in Farmers' Fields	<p>In general, SeEdQUAL is highly cognate with the cohesion of the portfolio. SeEdQUAL is an essential part of the Genetic Innovation Action Area that provides a continuum from Genebanks to reaching and benefiting farmers. SeEdQUAL is particularly well-linked within the Action Area with ABI, Market Intelligence and Product Profiling, and Genebanks but also with Resilient Agrifood Systems Action Area with strong links to EiA, Plant Health and Rapid Response to Protect Food Security and Livelihoods—thus has the potential to benefit across all five Impact Areas. However, coherence with CGIAR funding strategy is not clear.</p>
Sustainable Animal Productivity for Livelihoods, Nutrition and Gender Inclusion (SAPLING)	<p>There is evidence that the team ensured proper alignment with the cohesion of the proposed CGIAR portfolio. External cohesion: While SAPLING has demonstrated a strong consultative process in designing this Initiative, the proposal is weak on external coherence. External coherence could be addressed by articulating how SAPLING is positioned and complements other Initiatives at global and regional levels. It also does not articulate its comparative advantage vis-a-vis other global players in innovation and technology development and delivery.</p> <p>Interconnectedness of thematic and regional integrated Initiatives: There is some evidence presented regarding various Initiatives SAPLING would work with. The recognition of interdependencies across Initiatives is currently weak. As commented in the SAPLING proposal review, it must be deliberated and regularly reviewed during the implementation. For example, for a proposal that does not address planetary health and affordability of livestock-derived foods (LDFs) as its central concerns, the Initiative needs to ensure that the interlinkages with other relevant Initiatives are deliberately and synergistically built throughout the three-year period.</p> <p>Other provisions (i.e., data, ethics, result framework, etc.): The articulation of ethics and data sharing principles are in the proposal, but the CD itself is not very visionary in these aspects.</p>
Sustainable Healthy Diets through Food Systems Transformation (SHiFT)	<p>SHiFT has a good number of incoming links from other Initiatives, see CD's Figure 3 (p. 6). The Initiatives that SHiFT is formally partnering with make sense and offer good synergies (although it is not clear why the only regional Initiative in the partnership is TAFSSA—why not any of the African ones or the Latin American one given the country mix in SHiFT?). While these efforts were noted by the team, several potential opportunities for furthering internal and external coherence and strengthening interconnectedness across Initiatives (as noted in SHiFT proposal review's weaknesses) could be leveraged better and with a priori intentionality.</p> <p>Benefits projections in each Impact Area are appropriately considered in terms of synergistic delivery with other Initiatives.</p>

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Transformational Agroecology across Food, Land and Water Systems	<p>Vertical cohesion: The Initiative is structured based on the ToC framework and hence it aligns well with the CGIAR result framework (cf. CD’s Figure 6 and Annex 1), which is basically an application of the classical ToC. However, this model works well when Initiatives are top-down and/or unidirectional, moving from activities, to outputs, outcomes, and impacts, assuming causalities between these steps and an if-then logic. This model is, however, not always applicable—almost never to co-innovation approaches in agroecology, which are emic, bottom up, co-constructed, adaptive, emergent, and where the role of researchers and development agents is to facilitate, to broker knowledge, to create a dialogue of wisdoms to support self-investment, a sense of ownership and a risk-taking attitude by local actors, motivated by their active participation in a co-innovation process. Problems are addressed as they emerge, and solutions are developed through trial and error, experimenting together between different actors of a platform. There is no participant in such platforms that poses itself above the others, setting the agenda, deciding on the problems to be addressed or their priority. The Initiative evaluated here still speaks of “delivering CGIAR innovations” or “agroecology interventions,” which shows that the authors have no experience on how innovations emerge in the realm of agroecology.</p> <p>Lateral cohesion: This Initiative is part of the overarching results framework that comprises the 32 Initiatives that will be deployed by the CGIAR as from January 2022. Many (or most) of the scientists participating in this Initiative will also participate in other CGIAR Initiatives, and several Initiatives will be implemented in exactly the same target regions (and likely with the same households and communities). However, the messages conveyed by these different Initiatives are often contradictory. This will create confusion among the partners and beneficiaries on the ground. If the CGIAR wants to take up agroecology as its main approach to ag innovation and rural development, then the entire portfolio of 32 Initiatives should follow an agroecological approach. If the motivation of the CGIAR is to take up agroecology because the funders push for this, then a major transformation is needed across CGIAR, including capacity development and engagement with new types of social actors. Alternatively, CGIAR authorities could explain to funders that their core business is ecological or sustainable intensification, and not agroecology. Agroecology is a different paradigm for which the CGIAR has not been designed for or properly equipped.</p>
Transforming Agrifood Systems in South Asia (TAFSSA)	<p>The Initiative should enhance the cohesion of the portfolio and demonstrate measurable and verifiable outputs, outcomes, and impacts in line with CGIAR results framework. This shortcoming is especially visible in work packages 4 and 5. Connection of the research to policy is especially weak. This shortcoming could be overcome by providing justification through robust institutional analyses that shows how TAFSSA can produce verifiable outcomes and impact for programs and policy. Greater clarity is needed on “open-access system” that TAFSSA proposes to demonstrate the potential of the Initiative to support co-production of knowledge and monitoring and learning on issues of data interoperability and gender disaggregated data analysis.</p>

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Ukama Ustawi: Diversification for Resilient Agribusiness Ecosystems in East and Southern Africa (ESA)	<p>Ukama Ustawi addressed partnerships with some Global Thematic Initiatives (ClimBeR, LCSR, EiA) but is weak on others (Rethinking Food Markets, One Health). As a RII, Ukama Ustawi should act as the relationship steward with partners and host region-based research spearheaded by Global Thematic Initiatives. It should function more as the provider of a platform on which the Global Thematic Initiatives build than as a standalone source of new research on its own. Ukama Ustawi focused heavily on field- and landscape-scale innovations, but less on policy and institutional innovations, creating an imbalance among other CGIAR Initiatives. This is a missed opportunity for regional integration. There is evidence of strategic partnership efforts, e.g., WorldVeg, but more is required even in domains where CGIAR has capacity. Overall, more attention and resources should be allocated to work package 6 to improve coordination across CGIAR Initiatives and with partners.</p>

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