

Cover Note ISDC Review of Companion Document

Purpose

This pre-read for SC14 is the report of the Independent Science for Development Council (ISDC) review of the Companion Document to the 2022 – 2024 CGIAR Investment Prospectus. System Council requested ISDC to assess the Companion Document 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 Companion Document includes sections on the Document's strengths, overall considerations, detailed responses to each criterion, and the responses for each proposal review question.

Action Requested

The action requested by System Council is to read and reflect on the Companion Document review. The information presented is intended to support System Council in making decisions and recommendations for a cohesive and coherent One CGIAR research portfolio.

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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 1 2 Prospectus. With this approval came the request of a CGIAR-authored Companion Document¹ (CD) 3 that would detail the approach used to build a coherent and cohesive group of Initiatives to advance 4 the 2030 Research and Innovation Strategy. System Council requested the Independent Science for 5 Development Council (ISDC) to assess the CD concurrently during the ISDC external review of the 6 initial 19 Initiative proposals (September 30 to November 18). 7 8 System Council tasked ISDC to review the CD based on the four criteria of external coherence, 9 internal coherence, interdependencies, and management of funding uncertainties. In addition, ISDC 10 included a guestion 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, 11 12 overall considerations, detailed responses to each criterion, and the responses for each proposal 13 review question (for the latter see Appendix A). 14 15 **Companion Document Strengths** 16 17 ISDC is aware of the enormous challenges that the new management and leadership teams of One 18 CGIAR are experiencing and the limited time they had to establish a new modus operandi. The CD 19 provides strong evidence that the new structure is now operational and that it has a high chance of 20 delivering the new mission. ISDC hopes the review will accelerate the transition towards a science-21 based innovation culture across One CGIAR. 22 23 The CD is a well-considered and an important complementary resource to the 2022 – 2024 CGIAR 24 Investment Prospectus that outlines the context and framework used in Initiative codesign. The CD 25 addresses the four criteria requested by System Council and focuses on the operational aspects of 26 the Initiative development process. The CD further outlines the mechanisms that will be used to 27 adaptively manage the portfolio. ISDC acknowledges that the more than two-year consultation 28 process for the Prospectus was given high priority during considerable timing pressure and in a 29 COVID-affected environment. 30

31 ISDC appreciates and compliments the Executive Management Team and colleagues for establishing 32 a nested Theories of Change (ToCs) approach that logically links the overarching CGIAR-level ToCs, 33 which cascade to the three Action Areas and ultimately to the individual Initiatives and their work 34 packages. The long-term 2030 vision for each Initiative, alongside the three-year work packages, 35 facilitates alignment of the Initiatives with the 2030 Research and Innovation Strategy. Although 36 evidence of such alignment is missing from the CD, this may be provided in more detail within the 32 37 Initiative proposals.² The coherence and cohesion in Initiative delivery demonstrates the new One 38 CGIAR governance structure in action. This is instrumental for stakeholders not closely involved in

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.

- 39 the reform process to provide evidence of new management of complex problems. A coherent and
- 40 cohesive portfolio helps to build confidence that the new structure will be able to better deliver on 41 the CGIAR mission.
- 41

43 Overall, the financial planning at one- and three-year time scales are sensible. The principle of each 44 Initiative being considered for at least some inception funding to explore the potential is practical 45 and should be supported. The ISDC endorsement of this principle is based on the assumption that 46 the portfolio of Initiatives was constructed to ensure One CGIAR's delivery on all key strategic 47 objectives and that each of the 32 Initiatives makes important co-contributions to others and are 48 therefore essential for their success (i.e., the issue of interdependencies). The goal should be to 49 ensure that outputs and outcomes contribute to a cohesive One CGIAR portfolio with a balance 50 between short- and long-term investments. ISDC supports the idea of seed funding based on the 51 stated goal and assumption. However, after the seed stage, ISDC urges a curated portfolio approach; 52 this means to avoid funding distribution simply to achieve parity across the 32 Initiatives. 53 54 The reasoning behind Regional Integrated Initiatives (RIIs) is well articulated and highlights the need 55 for co-ownership, positioning CGIAR as innovation brokers—not always the originator of 56 innovations—and "demand creation and solution feedback loops." Using prototyping with a focus on 57 planetary boundaries is a real strength. 58

59 The CD includes important processes and principles that will drive the engagement with external 60 partners. Although much of this is still aspirational and a work in progress, ISDC appreciates its 61 inclusion. Thoughtful and inclusive preparation of a Partnerships Engagement Framework deserves 62 strong support and will be an essential deliverable during the inception phase of Initiatives. This will

- 63 require sustained efforts and investments.
- 64 65

65 Overall Considerations66

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.

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71 *Comparative Advantage*

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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.

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81 The need for a better understanding of comparative advantage is evident from the CD and the

- 82 individual Initiative proposals. The CD does not articulate *how* One CGIAR will ensure that the
- 83 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
- 85 stakeholders on a systemwide approach to define CGIAR's comparative advantage.
- 86

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
- 90 Initiative, and especially for new CGIAR research topics where potentially unfamiliar partnerships
- 91 must be explored and developed.
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- 93 Partnerships
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95 Without having the Partnerships Engagement Framework in place, assessment of how partnerships 96 are transparently identified, defined, and managed is challenging. The CD does not elaborate on how 97 partnerships will be initiated, monitored, or evaluated. Without adequate relationship mapping 98 across all 32 Initiatives, a comprehensive consideration of overlaps, synergies, and co-dependencies 99 is absent. Further elaboration on partnership mechanisms for interaction and codelivery of outputs, 100 outcomes, and impacts would be helpful. To achieve the 2030 collective global targets in the Results 101 Framework Table, scaling partners will be vital. Additional explanation of how scaling partners will 102 be engaged, and the approaches needed to build their capacity is desirable.

103

104 The CD emphasizes that "purposeful partnership" building and stewardship will be instrumental to 105 active, adaptive management of external coherence across the CGIAR portfolio of research and 106 investment. An important consideration is *inclusive* and *functional* partnerships to address the 107 Impact Areas and unreachable populations. This includes partnerships that consider gender,

- 108 diversity, and inclusion (GDI), early-career scientists, and farmers. Partnership elaboration at all
- 109 levels is warranted.
- 110

111 The Advisory Services Shared Secretariat external evaluation CRP reports and Synthesis emphasized 112 partnership recommendations and learning that should be incorporated across the portfolio and 113 strategic planning. The CD lacks details on how private-sector agents will be engaged as partners and 114 how these engagements will be legitimately managed.³ One recommendation from the Synthesis 115 that should be emphasized is: "The CRPs have focused primarily on government, community, and ARI 116 partnerships, but engaging the private sector will be critical for scaling innovations. Where CRPs did 117 work with the private sector to extend innovations, there was no evidence of a private sector 118 engagement strategy or analysis of the effectiveness and lessons learned from these efforts."⁴ The 119 CD does not outline how this recommendation will be strategically implemented. Partnership 120 development requires relationship management and CGIAR staff will need capacity development to 121 ensure private-sector partnership success.

- 122
- 123 Priority Setting and Funding
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125 The criteria for priority setting are outlined in item 19 but lack specificity that would allow

- 126 quantitative and qualitative priority assessments. The CD also lacks a contingency plan for
- 127 uncertainties that would allow CGIAR to be flexible, employ more novel strategic approaches, and
- 128 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
- 130 the 19 Initiatives, without an interpretation these linkages appear random. Further, any interlinkages
- 131 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
- 133 metrics including shared Innovation Package plan" p. 21) only make sense *if* and *when* the entire

⁴ CAS Secretariat (CGIAR Advisory Services Shared Secretariat). (2021). <u>Synthesis of</u>

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 <u>Quality of Research for Development in the CGIAR Context</u> (2020).

Learning from a Decade of CGIAR Research Programs. Rome: CAS Secretariat Evaluation Function (p. 16).

- 134 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.
- 136

137 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
- 139 not detailed (especially the *how, when*, and *where*). Notably, will revisions be written during
- 140 Initiative startup and how will these modifications be shared publicly?
- 141

142 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,

- 150 no matter the funding source.
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152 Coordination and Management

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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?

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162 *Innovation*

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164 "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." 165 166 The liberal use of the term degrades its meaning and while CGIAR has defined what innovation 167 means to the System,⁵ more clarity on what really constitutes innovation and what an innovation 168 culture entails is urgently needed. A better understanding of the mix of incremental, breakthrough, 169 and transformational innovations that are envisaged within and across Initiatives would provide 170 clarity and help with portfolio risk management (see ISDC's Innovation Brief prepared for the 14th 171 meeting of System Council for associated recommendations on the topic).

172

173 Item 22 addresses the bundling of innovations by linking the technical aspects to policies, while item 174 30a explicitly states the need for creating space for new research without degrading areas of existing 175 strength. Both, bundling and balancing strength with novelty, are important mechanisms to ensure 176 that innovations lead to impact. This also links with the concept of a "transfer marketplace" for 177 priority assets (golden eggs; item 46), which is an innovative institutional mechanism that should be 178 developed further.

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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).

182 The Four Criteria and their Assessments

183

184 This section provides detailed responses to the Systems Council assessment criteria of external

- 185 coherence, internal coherence, interdependencies, and management of funding uncertainties.
- 186

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.

187 One CGIAR's Initiatives were informed by several well-coordinated and timely inputs from a range of

- 188 consultations with the Investment Advisory Groups (IAGs) and Transition Advisory Groups (TAGs).
- 189 Extensive regional, national, and stakeholder consultations helped gauge demand for research
- 190 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
- 196 Platforms—generally appear sound for ensuring regional and thematic external coherence.
- 197 While the CD articulates key mechanisms in place to identify innovation, demand, and scaling 198 partners, it does not outline how One CGIAR will ensure that the Initiatives speak to the comparative 199 advantage of the CGIAR vis-a-vis other country, regional, and global players. The CD does not 200 elaborate on how the proposed Initiatives will seek complementarity with efforts of other research 201 institutions, or how One CGIAR seeks to harmonize efforts across a range of global players, especially 202 in new research areas for CGIAR. There is no clearly articulated strategy that outlines an approach to 203 partnerships to achieve external coherence. There is also little reference to any desirable 204 engagements with the external academic world. Considering how One CGIAR might influence global 205 research efforts and how such efforts in turn could benefit the One CGIAR mission are still lacking. 206
- 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.
- 215 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
- 217 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,

- 219 transactional perspective that views such engagement purely as a means towards achieving CGIAR's
- 220 objectives, which is necessary but not sufficient.
- 221
- 222 Further, what mechanism(s) will be established to ensure external coherence? Will these be Impact
- 223 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
- 225 monitoring and evaluating partnerships, although several Initiatives include some aspects. These
- details will presumably be included in the Partnerships Engagement Framework.
- 227

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 <u>CGIAR's Performance and Results Management Framework</u> 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.

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229 The detailed engagement among key players and their extensive discussions was designed to deliver 230 an agreed, aligned, and prioritized portfolio of activities that address the five Impact Areas. Such 231 engagement is intended to avoid duplication, resolve boundary issues, and prevent silos. The 232 process and outcomes of the extensive consultations resulted in a logical and well-designed high-233 level framework with nested ToCs that clearly indicate how the Initiatives should interact at various 234 levels of the portfolio. The ToCs also are aligned with the Performance and Results Management 235 Framework with three types of results (outputs, outcomes, and impacts) and acknowledgement that 236 CGIAR has direct control only for outputs.

237

238 Figure 3 (p. 6) attempts to show the linkages between the first 19 Initiatives. Some of the Initiatives 239 are designed to be cross-cutting and -thematic (e.g., Harnessing Digital Technologies for Timely 240 Decision-Making across Food, Land, and Water Systems). However, without an interpretation the 241 linkages appear unintentional. Figure 3 does not contribute to a better understanding of internal 242 coherence. The linkages are more easily seen and understood from the individual Initiative ToCs. The 243 overall cohesion/coherence of the portfolio will need further assessment after the second set of 244 Initiatives have been reviewed. Management mechanisms are described for the operational 245 oversight of developing and maintaining internal coherence as well as avoiding duplication or 246 overlap. These mechanisms involve Science Group staff and their communication with Regional

- 247 Directors and the portfolio performance management team.
- 248
- 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
- 256 dimensions of a matrix structure."

- 257 Clarity also is lacking on how the various directors (Science Groups, Regional Directors, and Impact 258 Areas) will work together and where the authority lies. Clarification of these details would be useful. 259 For example, a diagram showing organizational structure and reporting lines, including management 260 and communication among the groups, would be beneficial. This complex management structure 261 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 262 three-year cycle. Balancing operational imperatives with issues of probity and effectiveness will be 263 264 an ongoing challenge for all leadership teams. Hence, it will be paramount to align responsibilities 265 for delivery with the necessary authorities for decision-making. Many science-based organizations 266 suffer from an uneven distribution of responsibility and authority, with some sections having responsibility without authority, while others having authority without responsibility. Such an 267 268 uneven distribution inhibits the development of an innovation culture. 269 270 A critical area identified to benefit from the internal cohesion generated through Initiatives and

271 Platforms is capacity development. However, the CD is silent on the type of approaches needed to 272 develop and retain capacity within CGIAR. Capacity development is simply presented as something 273 that will happen rather than identifying how Initiatives and Platforms could proactively create

- 274 opportunities for capacity development. In fact, several of the Initiative reviews recommended
- 275 improvements on the Quality of Research for Development criterion 14 ("Capacity building within
- 276 project teams, partners, and stakeholders captured in capacity development plan").
- 277

278 There are some positive examples that will foster internal coherence while lowering transaction

- 279 costs. For instance, it is encouraging to read that Genebanks (item 17) might be approved on a
- 280 continuous basis. Another highlight is that mechanisms are in place to carry forward "golden egg"
- 281 assets from the CRPs that will help to maintain effectiveness over the next three years.
- 282

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.

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284 The vision of interconnected thematic and regionally integrated Initiatives is generally sound. Impact 285 Area Platforms and RIIs provide mechanisms to address interdependencies: for capturing 286 complementarities among Initiatives, minimizing unnecessary duplication of effort, identifying, and 287 closing key gaps in the portfolio, and helping with effective data and partnership stewardship. While 288 the vision articulated in the CD is generally thorough, correspondence with the RII proposals is 289 somewhat wanting, perhaps because the CD was developed in parallel to the first two of the RII 290 proposals. Little detail is provided beyond a partial page (section 3.2) in the CD on the

- 291 operationalization of the Impact Area Platforms.
- 292
- 293 As reflected in Figure 5 (p. 14), RIIs are central to CGIAR delivery of research for development. The 294 RIIs seem natural hubs for both trade-offs and foresight analyses at country and regional scale, for
- 295 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 296
- 297 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.
- 300
- 301 Country and regional offices are the natural locus for convening stakeholders to identify socio-
- 302 technical innovation bundles appropriate to the policy, institutional, and agri-environmental
- 303 contexts. The CD is largely silent about this role. RIIs and country offices seem best conceptualized as
- 304 platforms (and the continuous development of better platforms) for the assembly of innovations
- 305 developed by the Global Thematic Initiatives and external partners to achieve impacts, rather than
- 306 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 seemsnecessary.
- 309
- 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.

- 313 314
- 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
- 317 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
- 322 gaps or overlaps emerge through dialogue within the Impact Area Platforms network, who resolves
- 323 those issues? Lines of authority and responsibility need clearer definition. It seems natural for the
- 324 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
- 326 addressed.
- 327328 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
- Observation data from remote sensing platforms) that CGIAR must be alert to and then leverageeffectively.
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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.

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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

- 348 will use frontier research methods to meet the required standards of rigor (a real concern given the
- 349 long-time erosion of social science research capacity in many parts of CGIAR).
- 350

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?

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
- 352 Research and Innovation Strategy. The CD acknowledges that some Initiatives will receive more and
- 353 others less priority and requests that Initiative proposals be developed in accordance. The CD states
- 354 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
- 356 exceed the minimum quality standards.
- 357
- 358 The CD, however, does not detail the approach to prioritization nor is there an articulation of risk
- 359 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
- 361 some Initiatives will not get funded. The CD is silent on details of identifying, assessing, and
- 362 prioritizing of risks followed by coordinated and economical application of resources to minimize,
- 363 monitor, and control the probability and/or impact of unforeseen events or emerging risks.
- 364 While there is a recognition that financial resources may be insufficient to accommodate all
- 365 requirements, there are no alternative strategies identified and the CD lacks risk management and
- 366 scenario planning. Since the Initiatives are not alike, the risk management approach and plan must
- 367 be tailored to the scope and complexity of individual Initiatives. The CD also lacks a contingency plan
- 368 for the more difficult uncertainties to allow CGIAR to work more flexibly, employ more novel
- 369 strategic approaches, and work more closely with existing and potential funders.
- 370 ISDC recommends mapping CGIAR's substantive priorities for short- and long-term research, with a 371 clear process for priority setting and review that is evidence based. This will be essential for CGIAR to 372 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.
- 374 An implicit priority is to address impacts of climate change on agricultural production, aligned with 375 CGIAR's mission statement that focuses on systems in a climate crisis. Some Initiative proposals are 376 more closely aligned with this goal than others. However, agreeing on any single goal as a priority 377 seems to be difficult when considering diverging priorities in the regional and country contexts and 378 within current CGIAR governance processes. A prioritization approach that accommodates multiple 379 strategic goals, including climate impacts, may be a more appropriate prioritization architecture. 380 Furthermore, without a solid base of funding, any coherence is likely to disintegrate, and centers and 381 researchers will be left to chase bilateral support and resources, including people. 382
- 382 383

Appendix A: Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document? Responses by First 19 Initiative Proposal⁶

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	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.
ClimBeR Building Systemic Resilience Against Climate Variability and Extremes	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.
Conservation and Use of Genetic Resources (Genebanks) Initiative	From the Genebanks proposal it is not clear how the Initiative will interact with any of the six RIIs. 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

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	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.
	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.
	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?
	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.
Excellence in Agronomy for Sustainable Intensification and Climate Change Adaptation (EiA)	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.

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Livestock, Climate and System Resilience (LCSR)	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.
	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.
	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	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).
Transformation Initiative for GHG reductions of Agrifood systems RelaTed Emissions (MITIGATE+)	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.
	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.

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
	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.
	Integrated results framework at Initiative, Action Area, and CGIAR Levels: In general, this is well covered.
	Measurement and reporting at multiple levels and timeframes: The management plan and Gannt 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).
	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:
National Policies and Strategies for Food, Land and Water Systems Transformation (NPS)	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?
	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).

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
	The Initiative aligns well with the cohesion of the portfolio, as exemplified by the following (among the 92 items of the CD):
	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).
Network 4 Enabling	The Initiative is fitting with the CGIAR's Research and Innovation Strategy and is a high priority area aligned with funders priorities.
Tools, Technologies, and Shared Services (N4ETTSS)	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.
	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.
	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.
NEXUS Gains – Realizing Multiple Benefits Across Water, Energy, Food and Ecosystems (Forests, Biodiversity)	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.

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
Plant Health and Rapid Response to Protect Food Security and Livelihoods	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.
	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).
	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.
Protecting Human Health through a One Health Approach	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.
Rethinking Food Markets and Value Chains for Inclusion and Sustainability	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.

Initiative	Does the Initiative Align with the Cohesion of the Portfolio as Described in the Companion Document?
SeEdQUAL: Delivering Genetic Gains in Farmers' Fields	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.
Sustainable Animal Productivity for Livelihoods, Nutrition and Gender Inclusion (SAPLING)	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. 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. 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.
Sustainable Healthy Diets through Food Systems Transformation (SHiFT)	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. Benefits projections in each Impact Area are appropriately considered in terms of synergistic delivery with other Initiatives.

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	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.
	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.
Transforming Agrifood Systems in South Asia (TAFSSA)	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.

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)	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.