Synthesis Learning from a Decade of CGIAR Research Programs –
Action Area 2: Resilient Agrifood Systems

Background and Context

In 2020, in an ambitious One CGIAR reform, CGIAR commenced to streamline the governance, operational structures and processes guided by the **2030 Research and Innovation Strategy**.

In the Strategy, the overarching goal of the Action Area (AA) 2 on Resilient Agri-Food Systems (RAFS) is to improve the ability of farming and food systems to mitigate, adapt to, and recover from shocks and stresses, including climate change, natural disasters, and political and economic disruptions, in order to provide healthy, safe, and affordable diets for all, and decent livelihoods for poor and marginalized groups. Initiatives in this action area will focus on strengthening resilience and risk management, and on improving social equity through increasing access to productive assets. Research will explore multiple pathways for increasing the resilience of production systems, including agroecological and technology-based approaches. Special attention will be given to leveraging data and digital tools, and to ensuring that youth, women and other marginalized populations can access vital financial, legal and technical services.

The work in Action Area 2 will link closely with the Action Area 1 on Systems Transformation.

Evaluation Synthesis Methodology

In 2021, the Evaluation Function of the CGIAR Advisory Services (CAS) conducted an evaluative exercise to provide recommendations for and support the future One CGIAR. The **2021 Synthesis**, serves the dual purpose of accountability to CGIAR funders and learning from 10 years of implementing CGIAR Research Programs (CRPs)—see Figure 1 (overleaf).

The approach of the 2021 synthesis was summative and formative. The predominately qualitative method used a narrative approach to synthesize findings. The synthesis of evaluative evidence relied on information from 43 purposefully selected CRP and thematic evaluations and reviews. Validation of results and quality assurance relied mainly on data triangulation, including related synthesis of evaluative evidence. The quantitative method used basic descriptive statistics, where quantitative data on the quality of scientific publications were available. The overarching analytical framework was based on five themes: quality of science; inputs and progress towards outputs; performance; management and governance; and future orientation/relevance. Key limitations included the reliance on secondary source data due to the synthesis nature and desk-based nature of 2020 CRP reviews without first-hand, face-to-face contact with key stakeholders, evidence gaps and limited comparability across themes and subthemes; and limitations related to discontinuation of several of the systems CRPs after one phase.

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1 including climate change, natural disasters, and political and economic disruptions
Key Findings

A number of CRPs focused on understanding and addressing risk and resilience in agri-food systems at different levels.\(^2\) Key findings relevant to the Resilient Agri-Systems are as follows:

- Window 1 and 2 (W1/W2) funding for CRP programs was insufficient to provide a central driver to facilitate their intended outcomes and impact. Long-term, place-based research programs such as FTA’s Sentinel Research Program, and the systems research CRPs (Humidtropics, Drylands, Aquatic Agricultural Systems [AAS]) were most severely affected by W1/W2 funding constraints, and were unsuccessful in attracting longer-term bilateral funding.

- Most of the systems CRPs had only one phase; in retrospect, they represent a missed opportunity to advance understanding in integrated system research and stakeholder engagement that is highly relevant to Action Area 2.

- The systems CRPs took different conceptual approaches, not all of them successful. Drylands was criticized for focusing on small incremental changes to existing systems. AAS and Humidtropics both emphasized Research in Development and Participatory Action Research, but AAS failed to convert its promising model into interdisciplinary research on the ground. Humidtropics built on historic CGIAR farming systems research and challenge programs to develop prototype multi-stakeholder processes and innovation platforms.

- The systems CRPs accorded high importance and priority to partnerships, but strategies for partnership selection and network development were lacking. There were also no clear strategies or metrics to guide and evaluate capacity development activities with national partners.

- Despite the key role of the private sector in agri-food systems value chains, partnerships with private companies were limited.

- Several CRPs (e.g., Climate Change, Agriculture and Food Security [CCAFS], Policies, Institutions, and Markets [PIM], Agriculture for Nutrition and Health [A4NH], Humidtropics) were able to fill some key disciplinary and management gaps through effective partnerships with external advanced research institutions. However, the persistent deficit of CGIAR in-house social science capacity beyond economists contributed to an inadequate focus on the needs of the poorest and most vulnerable sectors, and constrained progress towards development outcomes and impact.

- The skill set and mode of engagement needed to achieve impact at scale is very different from the biophysical and economics background of most CGIAR scientists. For example, Water, Land and Ecosystems (WLE) and systems CRPs emphasized the importance of convening processes to ‘bring

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\(^2\) Refer to the Synthesis Annexes for more information.
science and development together’ and engaging ‘with diverse stakeholders to build mutual understanding and agree on potential options to manage landscapes and improve agriculture.’

- Metrics and methodologies to assess the quality of research for development, and progress towards sustainability, resilience, and poverty alleviation, need strengthening. Managers need technical assistance to design valid but practical, user-friendly Theories of Change (ToCs) and related metrics that serve as useful management tools.
- The CRPs produced many high-quality and relevant research products, but there is a disconnect between the time and resources needed to achieve development outcomes at scale and the lifespan of typical research activities.

**Selected Evidence Gaps**

Across the evaluations, there was a lack of depth in assessing cross-cutting themes that are important for the resilient agri-food systems action area, including gender, youth, climate change, Natural Resource Management (NRM), and capacity development outcomes.

**Lessons Learned**

The key lessons drawn from the Synthesis with implications for the Resilient Agrifood Systems AA are:

- Disciplinary and skill gaps—from social science, to communications and outreach, to risk management and finance—need to be filled internally and through external partnerships to increase CGIAR effectiveness in designing and implementing the inclusive research for development programs that are central to strengthening agri-food system resilience.
- Careful assessment is needed to determine whether targets are realistic, measurable, and achievable; and when targets include a last-mile delivery component to ensure that clear and appropriate roles are set for CRPs and partners from the start.
- Development outcomes and impacts cannot be achieved through CGIAR research alone. CRPs are generally not well-placed to deliver cost-effective and sustainable development outcomes and impact at scale. Sufficient prioritization and resources are required to demarcate the appropriate contribution of the CGIAR, and to develop relationships and strengthen the capacity of external public and private sector partners and stakeholders over time, starting from the beginning of the research process. Partners who perceive that they have an “ownership stake” in research that reflects their own priorities will be key collaborators in the sustainable scaling of research outcomes.
- Across the CGIAR, the quantity and quality of scientific inputs and outputs are systematically measured, but the same is not true of CGIAR’s contribution to wider and more complex development outcomes. The continuing focus on traditional measures of research success rather than harder-to-quantify measures—e.g., resilience, quality of partnership development, and capacity development outcomes—have important implications for the Resilient Agrifood Systems action area. With inadequate resources, capacities and attention to the engagement of others in priority setting and uptake pathways, researchers’ efforts to propel research outputs and outcomes to widespread adoption is limited.

**Conclusions and Recommendations**

Despite ongoing funding challenges, the CRPs showed great flexibility, ingenuity, and commitment in opening new and important areas of research with partners—including climate change, natural resource management, health and nutrition, and gender—and in experimenting with approaches to expand the meaningful participation of stakeholders in research prioritization, design, implementation, and scaling. These efforts provide a solid foundation for CGIAR efforts to strengthen the resilience of agri-food systems to meet increasing challenges related to climate change, natural disasters, and political and economic crises. Moving forward, One CGIAR should:

1. Reorient work to focus more on the vulnerable poor, in particular women and the disadvantaged and those at greatest risk from natural resource depletion, severe climate change impacts, economic deprivation, and conflicts.
2. Improve assessment and metrics related to risk and resilience and co-develop social and technical innovations with at-risk populations.
3. Foster adoption of technical and social innovations at scale, as required to achieve system transformation, and give greater emphasis to research on scaling science and implementation science.

Read the report and download the annexes: cas.cgiar.org/evaluation/publications/2021-Synthesis