

Draft CGIAR Performance and Results Management Framework 2022-2030

Companion document to draft CGIAR 2030 Research & Innovation Strategy

Prepared with input from subject-matter experts including Monitoring, Evaluation and Learning Community of Practice (MELCoP) Steering Committee, CGIAR Science Leaders and members of the CGIAR Transition Consultation Forum

Introduction

This Performance and Results Management Framework supports delivery of the CGIAR 2030 Research and Innovation Strategy and describes the processes, systems and performance management measures that will support delivery. It provides the basis for CGIAR's:

Accountability:

 Provide transparent, timely, robust evidence of CGIAR's outputs, outcomes and impacts, and return on investment,

Learning:

- Improve performance over time based on experience,
- Adaptive management,
- Treating success and failure with the same spirit of enquiry and openness,

• Communications and resource mobilization:

 Provide evidence and content base to help align, elevate and diversify the way that CGIAR approaches resource mobilization, communications and advocacy,

The PRMF supports CGIAR's impact pathways through:

- Providing accurate and readily accessible information on CGIAR innovations and other outputs in ways that enable uptake by partners and research users,
- Generating knowledge on CGIAR's contributions to development to enable partners and CGIAR to co-define clearer roles for CGIAR within specific innovation systems and strategic partnerships,
- · Providing evidence to inform decisions on impact-oriented investment,
- Building capacity to effectively manage performance (Figure 1).

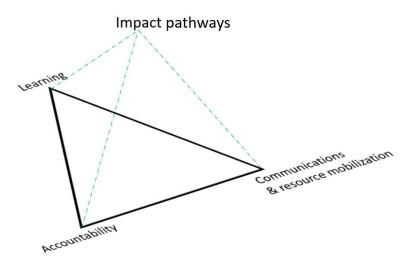


Figure 1 The Performance and Results Management Framework enables CGIAR to meet learning, accountability and communications & resource mobilization objectives – and supports CGIAR's impact pathways

The PRMF provides a line of sight from CGIAR Initiative investment to Sustainable Development Goal (SDG) contribution. It will facilitate delivery of outcomes and impact from CGIAR's work through systematic and transparent planning, monitoring and learning about performance, return on investment, and – ultimately – CGIAR's contribution to impact at scale.

Stop-go decision points (stage-gates) will apply to all CGIAR Initiatives and be used to manage all Initiative sub-components. Using this approach, all CGIAR Initiatives will be divided into distinct stages, separated by assessment

and decision points known as stage-gates. Stage-gates will inform resource allocation within Initiatives to the most promising and potentially impactful components, as well as frame adaptive management and learning.

Building on investments made in the 2011-2020 portfolio, a fit-for-purpose Performance & Results Management System that encompasses planning, monitoring, and reporting will support delivery by providing timely, robust and relevant information to decision-makers.

Impact pathways through innovation systems

CGIAR understands innovation systems as central to impact at scale. Innovation – the package of complementary contributions needed to develop and take to scale products, services and solutions – happens within innovation systems of partnerships, networks, assets and institutions. Using an overall framing of innovation systems, CGIAR measures its contributions from research to impact along three main pathways, all working within partnerships:

- Science-based innovations co-development of bundles of knowledge products, technologies, institutional arrangements, services and other solutions along a scaling pathway. Activities include participatory design, testing and piloting, and researching and advancing the enabling environment.
- Targeted capacity development working with individuals and organizations designed to improve the
 utility and use of innovations. Activities range from training-of-trainers at the farmer level, through to
 ongoing institutional support to national partners, particularly NARES peers, and decision support for
 policy-makers at global level.
- Innovation in policy including business strategies and development programs together with more formal public policy sector instruments. Activities include engagement in policy dialogue at all levels, as well as policy analysis, foresight and other tools (Figure 2).

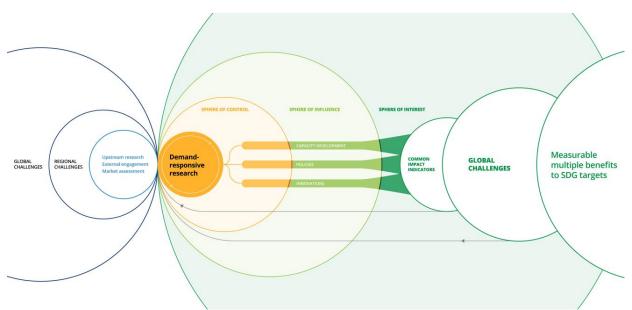


Figure 2: Impact pathways through innovation systems

Results framework

CGIAR's results framework (Figure 3) is directly aligned to the five impact areas and Sustainable Development Goals. Three distinct result types: outputs, outcomes and impacts are mapped to the spheres of Control, Influence and Interest, respectively.

- Outputs: Knowledge, technical or institutional advancement produced by CGIAR research, engagement and/or capacity development activities. Examples of outputs include new research methods, policy analyses, gene maps, new crop varieties and breeds, institutional innovations or other products of research work.
- Outcomes: A change in knowledge, skills, attitudes and/or relationships, which manifests as a change in behavior, to which a combination of research outputs and related activities have contributed.
- Impacts: Change in state or flow resulting from a chain of events to which research outputs and related activities have contributed.

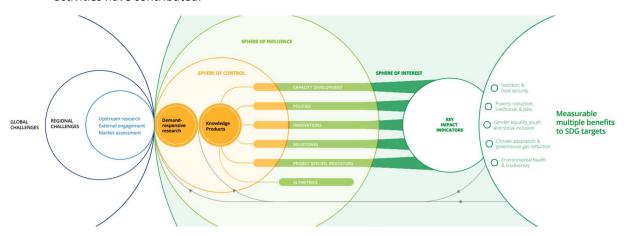


Figure 3 CGIAR results framework mapped to spheres of control, influence and interest provide line of sight from Initiative intervention to SDGs and impact areas

Indicators – Spheres of control and influence (outputs and outcomes)

A small set of indicators span the spheres of control and influence. These underpin CGIAR's contribution to impact, and are largely drawn from the 2017-21 CGIAR portfolio, optimized based on experience and to suit CGIAR 2022-2030 needs.

1. Knowledge products:

- a. Number of peer-reviewed journal papers: CGIAR research papers published in peer-reviewed journals (Open Access, ISI, Altmetric attention score).
- b. Other: Book chapters, maps and geospatial data, databases, business models, grey literature, policy briefs, conference papers and posters, training materials, multimedia.

2. Capacity development:

- a. Number of people trained (short and long-term training, including PhDs) disaggregated by gender.
- b. Change in the science & knowledge capacity of key (i) Individuals, (ii) Organizations (government, civil society and private sector), and (iii) Networks (e.g. multi-stakeholder platforms).

3. Innovations:

- a. Number of research and development innovations. Innovation types: (i) Genetic varieties and breeds, (ii) Production systems and management practices, (iii) Social science, (iv) Biophysical research, (v) Research and communication methodologies and tools.
- b. Innovations scale as part of packages that can consist of technologies, policies, market arrangements, and access to finance. Innovation packages will be assessed for their readiness and use. Readiness (design, testing and validation of innovation) Level I: Discovery Low Innovation Readiness, Level II: Successful piloting Medium Innovation Readiness, Level III: Available or ready for uptake High Innovation Readiness. Innovation Use (scaling of innovation) Level I: Uptake by project and partners Low Innovation Use, Level II: Uptake by next user Medium Innovation Use, Level III: Uptake by end user High Innovation Use.

4. Policies:

a. Number of policies/ strategies / laws/ regulations/ budgets/ investments/ curricula modified in design or implementation, informed by CGIAR research. Three levels of result maturity: (i) research taken up by next user, (ii) policy enacted, and (iii) evidence of impact on people and/or environment of the policy.

5. Initiative-specific indicators:

a. Additional Initiative-specific indicators required and/or beneficial to understanding progress and contribution to impact.

6. Milestones:

a. A time-bound target that reflects progress towards a planned result. Milestones include both outputs, output use and outcomes along impact pathways as appropriate to the scale and maturity of the work.

Indicators: sphere of interest (impact)

CGIAR will deliver relevant results into shared impact pathways, contributing science to inform system transformation in ways that achieve the sustainable development goals. CGIAR is targeting multiple benefits across five impact areas, aiming for net positive impact on: (i) Nutrition, health & food security; (ii) Poverty reduction, livelihoods & jobs; (iii) Gender equality, youth & social inclusion; (iv) Climate adaptation & greenhouse gas reduction; and (v) Environmental health & biodiversity.

These benefits are closely linked to the SDGs, particularly SDG2 on Zero Hunger, but also SDG1: No poverty, SDG 3: Good health and wellbeing, SDG 4: Quality education, SDG 5: Gender equality, SDG 6: Clean water and sanitation, SDG 7: Affordable and clean energy, SDG 8: Decent work and economic growth, SDG 9: Industry, innovation and infrastructure, SDG 10: Reduced inequality, SDG 11: Sustainable cities and communities, SDG 12: Responsible consumption and production, SDG 13: Climate action, SDG 14: Life below water, SDG15: Life on land, SDG 16: Peace and justice strong institutions and SDG 17: Partnership to achieve the goals.

For each of the five impact areas, CGIAR will contribute to collective targets for transformation of food, land and water systems across local, regional and global levels. In support of these global targets, all CGIAR Initiatives will use common impact indicators to link their results in the spheres of control and influence to the five impact areas and SDG Targets:

Impact area	Impact target for transformation of food, land and water systems	Proposed common impact indicator
Nutrition,	Deliver affordable healthy diets to 8.5 billion	#people reached with relevant CGIAR
health & food	people, ending all forms of malnutrition for the	innovations
security	690 million who suffer from hunger, 2 billion	
	who suffer from micronutrient deficiency and	#people meeting minimum dietary
	2.2 billion who are overweight or obese, and	energy requirements

	reducing by one third cases of foodborne illness (600 million annually) and zoonotic disease (1 billion annually).	#people meeting minimum micronutrient requirements
		#cases communicable and non- communicable diseases
Poverty reduction, livelihoods & jobs	Lift 500 million people above the \$1.90 a day (2011 PPP) extreme poverty line and reduce at least by half the proportion of men, women and children of all ages living in poverty in all its	#people reached with relevant CGIAR innovations #people assisted to exit poverty
	dimensions according to national definitions.	
Gender equality, youth & social	Close the gender gap in access to resources, information and power for the 750 million women who work in food, land & water	#women reached with relevant CGIAR innovations
inclusion	systems, and offer decent opportunities to 267 million young people who are not in employment, education or training.	#youth reached with relevant CGIAR innovations
Climate	Turn agriculture and forest systems into a net	#women assisted to exit poverty #tonnes CO ₂ equivalent emissions
adaptation & greenhouse gas	sink for carbon; by 2050; implement all national adaptation plans (NAPs) globally and Nationally and update Determined Contributions (NDCs).	#plans with evidence of implementation
. cauciicii	(1.2 so).	#\$ climate adaptation investments
Environmental health &	Stay within planetary and regional environmental boundaries: consumptive water	#ha under improved management
biodiversity	use of under 2,500 km3 per year (with a focus on the most stressed basins), zero net	#km³ consumptive water use
	deforestation, nitrogen application of 90 Tg year –1 (with a redistribution towards low-input	#ha deforestation
	farming systems) and phosphorus application of 10 Tg year –1.	#Tg nitrogen application
	Maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels.	

In support of these global targets, specific impact pathways and indicators will be identified for each CGIAR Investment Plan. All CGIAR Initiatives within these Investment Plans will develop an accountability framework of the outputs, outcomes and impacts that CGIAR intends to deliver to address these Impact Areas using a stage-gating approach. All CGIAR Initiatives will at a minimum map their outputs and outcomes to this common set of impact indicators. SDG Target indicators and/or Initiative-specific impact indicators will complement the common impact indicators where applicable. CGIAR will measure collective (i.e. incorporating multiple actor contributions) progress towards global-level targets rather than attempt attribution to CGIAR efforts alone.

Planning, monitoring, reporting, evaluation, impact assessment

An interlinked set of planning, monitoring, reporting, evaluation and impact assessment processes is required to effectively plan, manage and learn from CGIAR contribution to impact.

• CGIAR Initiatives [components] will:

- Project the benefits of their intervention against the CGIAR result framework, specifically to the common impact indicators and SDG Targets, at design and implementation stages,
- Plan and report progress against a theory of change (ToC) that incorporates results and indicators across the spheres of control, influence and interest as detailed above,
- Develop annual plans of work and budget, track progress and provide an annual report against their stated objectives and results achieved,
- Be divided into distinct stages, separated by assessment and decision points known as stage-gates.
 The stage-gates will inform resource allocation within Initiatives to the most promising and impactful components, as well as frame adaptive management and learning.
- Commission evaluative studies and ex-ante/ex-post impact assessments to test and improve their
 ToC and contribution to impact as appropriate.

CGIAR will:

- o Compile and communicate a system-level annual plan of work and budget, and a CGIAR-level annual report comprised of Initiative-level inputs,
- Commission evaluative studies and ex-ante/ex-post impact assessments to demonstrate and learn from CGIAR contribution to impact indicators, Impact areas, and SDG Targets,
- Ensure that independent evaluations and impact assessments by CGIAR Advisory Services feed into Investment Plan cycles.

Theory of change

A theory of change (ToC) is an explicit, testable model of how and why change is expected to happen along an impact pathway in a particular context. A basic research-for-development ToC identifies the context and key actors in a system and specifies the causal pathways and mechanisms by which research outputs will contribute to outcomes and impacts, and the risks to those pathways.

Use of ToC

One CGIAR will strengthen design and use of ToC at CGIAR, Initiative and component levels. ToCs will contain increasing detail and management-focused content from CGIAR scale down to Initiative component scale. Lower-level component ToCs will nest within Initiative and CGIAR ToCs respectively.

- At the CGIAR level, the ToC will guide and communicate the major impact pathways of agricultural research for development and position CGIAR Initiatives within the overall CGIAR strategy.
- Initiative ToCs will support modelling for projected benefits; model and manage for multiple impact
 pathways, including technological and non-technological; identify partners and their role in improving
 innovation readiness and innovation use; identify milestones for monitoring progress; and frame end-ofInitiative evaluations.
- ToCs at the Component (sub-Initiative) scale will be specified in detail for particular social, economic, political, and environmental contexts, and how innovations, partnerships and capacity development will contribute to impact at scale.

In stage-gating, ToCs will serve as an object of assessment: assess whether the ToC(s) was developed according to best practices.

 At the proposal stage-gates, the ToC should: incorporate a good understanding of context; explain prior related work; address stakeholder needs; alignment with context-specific agricultural strategies and policies; identify Initiative activities and outputs; identify key system actors and outcomes; state theoretical and contextual assumptions; identify feasible end-of-Initiative outcomes and longer-term outcomes/impacts. In implementation stage-gates, assessment will consider how the ToC is being used to guide Initiative
activities, monitor progress, test assumptions, adapt strategy and management (including revising the ToC
as needed).

In stage-gating, ToCs will also serve as a framework for assessment: the ToC will be used to assess the feasibility of an Initiative (or component) at the proposal stage, identify and assess progress indicators for mid-term evaluation, and specify appropriate outcomes to be evaluated at end-of-Initiative.

Quality of Research for Development

The Quality of Research for Development (QoR4D) Framework aims to guide and enhance the quality of R4D at all levels, from strategy to research activities. It goes beyond typical disciplinary criteria of science quality to also consider how an overall research project (or program) is designed and implemented to increase the likelihood and the magnitude of positive outcomes and impacts. It starts with the premise that, for research to be useful and used, it must be perceived to be relevant, credible and legitimate by intended research users, and it must be positioned for use. QoR4D design principles and assessment criteria consider (for example):

- how research strategies and specific research questions are developed, defined and researched to be both socially and scientifically salient;
- how projects and teams are organized; how research activities are expected to contribute to the change process envisioned by the project and contributing to intended outcomes and impacts; and
- whether and how the necessary support and facilitation functions are incorporated to contribute effectively to positive outcomes.

In stage-gating, QoR4D will serve as a framework for assessment, with criteria adapted per stage-gate. We will assess whether the design (proposal gates) and Initiative progress (implementation gates) satisfy criteria relating to Relevance, Credibility, Legitimacy, and Effectiveness.

Stage-gating within CGIAR Initiatives

Stage-gating is a performance management approach in which CGIAR Initiative components are divided into distinct stages, separated by assessment and decision points known as stage-gates. The objective of stage-gating is to ensure the delivery of impact-oriented results in support of the 2030 Research and Innovation Strategy. Stage-gates will be applied to all CGIAR Initiative components and will feature assessment of Initiative design and implementation. Stage-gate assessment principles and criteria will guide and encourage strategic focus, careful Initiative design, and learning through implementation. Stage-gate decisions will determine resource allocation within Initiatives to the most promising and impactful components, as well as frame adaptive management and learning (Figure 4).

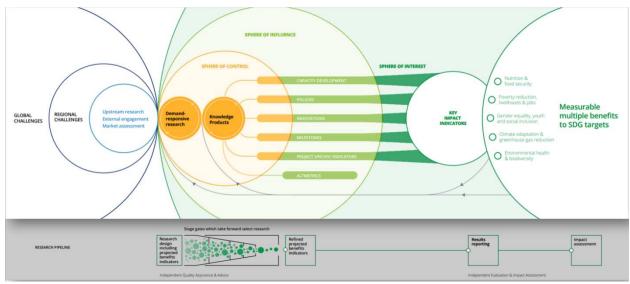


Figure 4: CGIAR Initiative components are divided into distinct stages, separated by assessment and decision points known as stage-gates. The objective of stage-gating is to ensure the delivery of impact-oriented results in support of the 2030 Research and Innovation Strategy

Stage-gating principles

CGIAR's stage-gating approach will be based on four principles:

- 1) Enable transparent, evidence-based allocation of resources
 - Reduce transaction costs and time spent on lower priority activities
 - Linked to effectiveness of innovation design, testing, validation and use
- 2) Support adaptive management of CGIAR Initiatives along a ToC
 - · Incorporate likelihood of achieving development impact/Quality of Research for Development
 - Clarify timing and modalities of collaboration with partners towards adoption and scaling
- 3) Facilitate performance management using specific indicators and metrics
 - Supported by clear criteria, data collection and analysis protocols
 - Applicable to both technological and non-technological CGIAR innovations
- 4) Encourage innovation and creativity
 - Stimulate learning, reflection and adaptive management, including reorientation of research and reallocation of resources
 - Universal at portfolio level, flexible at Initiative and component level

Stage-gate parameters

- Gate decisions: Proceed, Adapt/Modify, and Cancel.
- Gate types: Initiative Concept stage, Initiative Full Proposal Stage, Initiative Implementation Stage (recurring e.g. annual), End-of-Initiative Stage.
- Gate frequency: Allow for at least one course correction within Initiative cycle; timing should be based on level of attainment of the research area.
- Gate keepers: Will depend on final structure of CGIAR modalities; Initiatives developed with regional and national partners should include those representatives in stage-gating decisions
- Gate criteria: Based on past results plus projected costs and development impact (considerations could include ToC, QoR4D, Scaling Readiness, risk, Gender in research & GDI).

Stage-gate delivery and use

A Performance and Results Management System (PRMS) will be used to collect relevant data and make it available for use in Initiative management, including stage-gate decisions.

Performance and results management system

Building on investments made in the current phase of CGIAR research programming, a comprehensive, mature and accessible Performance & Results Management System that encompasses planning, monitoring, and reporting will provide robust information upon which to take informed decisions. It will provide:

- Practical services aligned to meet learning, accountability and resource mobilization objectives
- Dashboards open to Funders and partners, with access to the full set of underlying quality-checked data
- Alignment with international standards such as IATI (International Aid Transparency Initiative)

Key features:

The CGIAR Performance and Results Management System will feature:

- A common system housing plan of work and budget, theory of change management, stage-gate decision
 points, and annual reporting processes. It will allow real-time data collection and day-to-day portfolio and
 Initiative management.
- Key data sets (results, plan of work and budget, grant, finance, stage-gate specific e.g. Scaling Readiness) will be increasingly linked (e.g. through <u>CLARISA</u>: CGIAR Level Agricultural Results Interoperable System Architecture, a web service that harmonizes data from across the CGIAR). Interface and exchange with big data and partner data sets (e.g. <u>WIPO Green</u> and the <u>International Treaty on Plant Genetic Resources for Food and Agriculture</u>) will increase.
- An enterprise Knowledge Graph will provide the basis for CGIAR's digital knowledge base, use the SDG Interface Ontology to better link its contribution to impact with that of partners, and make better use of linked data.
- An integrated dashboard will draw from relevant data sets to provide transparent data and insights on CGIAR geographic and thematic presence, achievements, spend and partner network.
- CGIAR will publish relevant data through IATI.

Users:

Target users of the PRMS include:

- CGIAR staff for day-to-day Initiative management and reporting, portfolio management and resource mobilization,
- Funders and partners to access evidence of CGIAR thematic and geographic presence and progress against stated objectives such as the SDGs.

Security, hosting, maintenance and support:

The Performance and Results Management System will incorporate:

- Secured infrastructure
- Cloud hosting
- CGIAR Active Directory integration for user provisioning and account management
- Access control through Multi-Factor Authentication
- Single Sign On
- Tiered support and maintenance approach aligned with CGIAR's IT support model.