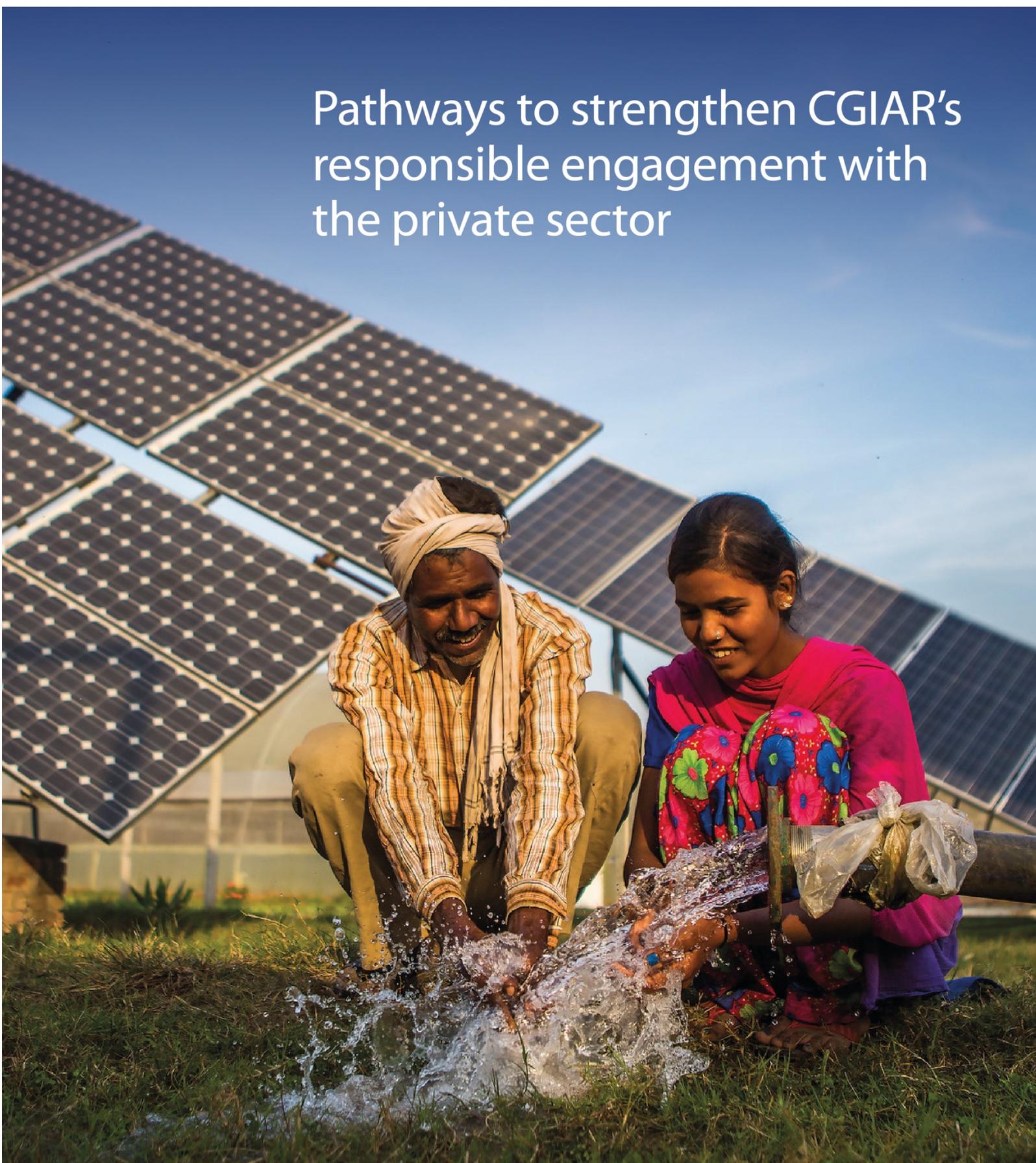




OPEN FOR BUSINESS

Pathways to strengthen CGIAR's
responsible engagement with
the private sector



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First published by CGIAR and the NL-CGIAR Strategic Partnership
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Year of publication: 2022

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Correct citation:

Cummings, S., J. Koerner, M. Schut, R. Lubberink, T. Minh, D. Spielman, J. Vos, M. Kropff (ed.) and C. Leeuwis (ed.) 2022. Open for Business: Pathways to strengthen CGIAR's responsible engagement with the private sector. CGIAR Special Report published in collaboration with the NL-CGIAR Strategic Partnership. April 2022, 45pp.

We would like to thank all funders who supported this research through their contributions to the CGIAR Trust Fund:
<https://www.cgiar.org/funders/>



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The evaluation, research and activities on which this report is based were commissioned by the NL-CGIAR Strategic Partnership on request of the Dutch Ministry of Foreign Affairs and the Ministry of Agriculture, Nature and Food Quality, and CGIAR. Nevertheless, the content of this report does not necessarily reflect the views of the Ministries or that of CGIAR. The findings, interpretations and conclusions expressed herein may not necessarily reflect the views of all authors or the organizations they represent.

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Preface from CGIAR

We welcome the initiative of the Netherlands to highlight ideas to build on CGIAR's successful engagement with the private sector. This special report brings a welcome new perspective to some of our past achievements while also helping chart a way forward.

The 'CGIAR 2030 Research and Innovation Strategy' emphasizes a new breed of partnerships to respond to today's complex and interlinked challenges. And private sector partnerships are an essential piece of the puzzle. Bringing a business focus to our work is fundamental to bridge the gap between innovation and use. Crucially and with no time to waste as climate change imperils food systems, private sector partnerships will accelerate impact at scale.

In the past partnerships were often formed around technical silos – crop-specific, or anchored in the traditional demarcation of issues within governments – separating issues of environment, health, education, etc. As CGIAR, we will be better equipped to respond to cross-sectoral challenges together with partners across the public and private sectors.

2021 saw growing global recognition of the need to invest in agri-food systems that foster human development while reducing environmental impact. COP 26 underlined the willingness of the international community to support the generation of solutions that will reorient the way we produce and consume food and to help keep global warming below 1.5 degrees. And the Statement of Action from the UN Food Systems Summit included recognition that we must also invest in science and innovation. It's a message that has resonated through the G7 and G20 and which has been amplified by global voices such as Agnes Kalibata, Ban Ki Moon and Bill Gates.

CGIAR's original mission fifty years ago was 'securing the harvest' for key crops. Our new mission is to 'transform food, land and water systems in a climate crisis'. Innovation in behaviours, technologies, and practices will be essential to achieving this systems transformation. Fresh ideas, backed by research to provide the evidence of what works and where, so that policymakers, farmers, private enterprises and the public can make the right choices. The 500 million smallholder farmers that produce up to a third of our food cannot rely on methods, technologies, solutions and crop varieties that are decades old to weather climate impacts that are already adversely affecting harvests.

None of this can come about in isolation. Good ideas – innovation – can only flourish in partnerships. There is an urgent need to foster stronger private sector partnerships which have an especially important role in stimulating rapid scaling of innovations. As CGIAR, we will develop mechanisms to act as a one-stop-shop for private sector enterprises, to enable the sharing of solutions and capacities, sustainable and ethical sourcing, intellectual property rights, and transparent contracting. And I can promise you that the shop's doors are well and truly open for business.

Claudia Sadoff

Executive Management Team Convener and Managing
Director, Research Delivery and Impact



Preface from the Netherlands

Our food system is essential to life. It nourishes us and keeps us healthy, it provides livelihoods for millions of people, and is fundamental to the health of our ecosystem. It is clear that ensuring the sustainability of our food system is one of the biggest challenges of our time. It is a challenge of such scale that action by individual organizations, while important, will be insufficient. We need to work together to forge ahead.

Far-reaching sustainability transitions across food, land, and water systems are needed. These challenges triggered, amongst others, the UN Food System Summit last year and the fundamental reform of CGIAR.

These food system transitions will require – and at the same time stimulate – a great deal of new science and innovation. Over the past 50 years, CGIAR has played a fundamental role in the provision of food security and support to smallholder farmers – women and men. With the emerging challenges in our food system around nutrition, health, environment and the impact of climate change, we are confident that CGIAR, the world’s largest public agricultural research network, can make a significant contribution to its re-alignment. With all partners embracing CGIAR’s impressive institutional and programmatic reform agenda, we believe the ‘CGIAR 2030 Research and Innovation Strategy’ and its goals can be successfully achieved.

The Netherlands has a proven track record in creating joint solutions through partnerships between government, companies, civil society and research and knowledge institutions. In tackling the food system challenges of poverty, nutrition, health and the environment, there is no alternative than to collaborate effectively between the public and private sector. Business, formal and informal, provides for the lion’s share in the economy, financial flows and job creation. Thus, engaging businesses in innovation systems for scaled-up impact of research on, in particular, Sustainable Development Goal 2 – zero hunger – is essential.

In 2022, CGIAR is engaging in a new 2030 research portfolio, recognizing the need for new partnerships with the private sector. We encourage CGIAR to fully benefit from the many lessons on engagement in public-private partnerships and we are more than willing to share our knowledge and know-how. This Report is an invitation and a resource to do exactly that. Working together means daring to look beyond your own boundaries, making connections and having the willingness to be curious and innovative. Together, we can transform our food systems. We have no time to waste.

Kitty van der Heijden

Director-General for
International Cooperation
Ministry of Foreign Affairs
of the Netherlands



Marije Beens

Director-General for
Agriculture and Food Quality
Ministry of Agriculture,
Nature and Food Quality



Acronyms

ABF	Althelia Biodiversity Fund, Brazil
A4IP	Accelerate for Impact Platform
A4NH	CGIAR Research Programme on Agriculture for Food and Nutrition
BIP	IITA Business Incubation Platform
CCAFS	CGIAR Research Programme on Climate Change, Agriculture and Food Security
CIAT	International Centre for Tropical Agriculture
CIMMYT	International Maize and Wheat Improvement Centre
CIS	climate information system
CSA	climate-smart agriculture
CSC	climate-smart cocoa
FAO	The Food and Agriculture Organization of the United Nations
GMet	Ghana Meteorological Agency
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
IMIC - Africa	International Maize Improvement Consortium for Africa
IPR	Intellectual property rights
IRRI	International Rice Research Institute
JIU	UN Joint Inspection Unit
LMICs	low- and middle-income countries
NSI	North South Institute, Canada
OECD	Organization for Economic Cooperation and Development
OECD-DAC	OECD Development Assistance Committee
PPPs	public-private partnerships
R&D	research and development
RTB	CGIAR Research Program on Roots, Tubers and Bananas
SDGs	Sustainable Development Goals
SMEs	Small and medium-sized enterprises
UN	United Nations
USAID	United States Agency for International Development
WCF	World Cocoa Foundation

Executive summary

CGIAR has considerable experience with private sector engagement in the context of its mission to create sustainable and resilient food, land and water systems, and there is continuing interest and dialogue on this theme within CGIAR and the international development community more generally. The on-going CGIAR reform provides an opportunity to capture those experiences and harmonize strategies under the new structure, as has been acknowledged in the new 'CGIAR 2030 Research and Innovation Strategy'. Commissioned by the NL-CGIAR Strategic Partnership, this report aims to identify, discuss and evaluate pathways for strengthening collaboration between CGIAR and the private sector to stimulate innovation and the scaling of these innovations in food, land and water systems. The objective is to advance private sector engagement in the CGIAR, based on transparent CGIAR system-wide mechanisms and processes.

Legal opportunities to scale CGIAR innovations are needed, together with rules of engagement that embrace opportunities and manage risks. Drawing on CGIAR's Strategic Investment Plan, and informed by foundational strategy documents for private sector engagements by the United Nations (UN) and the Organization for Economic Cooperation and Development (OECD), this report seeks to provide a cornerstone for CGIAR's private sector engagement strategy.

Based on 12 cases of existing partnerships and projects with the private sector, this report provides actionable recommendations on: (1) how to optimize **benefits** from private sector engagement, (2) how to manage **risks and challenges**, (3) the development of **key principles**, for governing partnerships with the private sector (4) **key mechanisms** for managing private sector engagement, and (5) **institutional actions** CGIAR can take to make private sector engagement work. This report provides key points of attention and ideas for what a private sector engagement strategy should involve, including advocating for a stakeholder consultation and formulating a planning process for increasing and improving engagement. Towards these goals, three strategic steps are proposed:

- **Step 1. An organizational approach:** Identify how the roles, responsibilities, mandates, resources and facilities for private sector engagement are distributed across CGIAR to take the process forward.
- **Step 2. Mandated task force:** Develop a temporary but clearly mandated task force and consultation process within the CGIAR, and with external stakeholders, to discuss the recommendations of this report and receive wider inputs.
- **Step 3. Strategic action plan:** Develop a strategic action plan covering phased, planned and funded activities for the different support functions (see **Next Steps**) of what could become a one-stop-shop for CGIAR's private sector engagement.

For CGIAR's private sector engagement to effectively contribute to – and benefit from – innovation, scaling and broader food, land and water systems transformation, both CGIAR and the private sector need to be 'open for business', i.e., ready to take action to solve global challenges together.



Introduction

Setting the scene

CGIAR is one of the most influential organizations in the international agricultural research-for-development system. It was formed in 1971 to support the agricultural research needs of low- and middle-income countries (LMICs).¹ It has undergone several reforms in past decades and is now being restructured as *One CGIAR*² with the mission ‘to deliver science and innovation that advance transformation of food, land, and water systems in a climate crisis’,³ with the ultimate objective of contributing to the Agenda 2030 and the Sustainable Development Goals (SDGs).⁴ To achieve this mission, CGIAR aims to bring about multiple benefits and transformative change across five SDG-focused ‘impact areas’:

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

Achieving the above will require investing in innovation, capacity sharing, and policy engagement, all involving partnerships with a broad variety of sectors and stakeholders. For CGIAR to be successful in achieving its mission, partnerships in innovation, capacity sharing and policy engagement with the private sector are essential. The new mission also calls for institutional innovations from CGIAR and from the private sector, such as new organizational structures.

Despite considerable experience of private sector engagement and continuing dialogue on this theme⁵ – as can be seen in CGIAR’s more than 12,000 reports, policy briefs, journal articles and presentations on CGSpace⁶ – the organization is in the process of formulating a new strategy for engaging public-private partnerships (PPPs). This is, in part, to address a gap between ambition to engage with the private sector and current reality – as acknowledged in the CGIAR 2030 Strategy report.⁷

Many CGIAR centres consider that the private sector is essential for scaling innovations in the agricultural sector, particularly in the seed sector, and for linking smallholder farmers with the food sector. Analysis of such examples, case studies and foundational strategy documents by the UN and OECD Development Assistance Committee (OECD-DAC), provided in this report, can inspire and inform the starting point for CGIAR’s private sector engagement strategy.⁸

The report

The goal of this report is to identify, discuss and evaluate pathways for strengthening collaboration between CGIAR and the for-profit private sector as a means for stimulating and scaling innovation (Box 1). In particular, this joint NL-CGIAR report provides actionable guidance and recommendations to advance private sector engagement with CGIAR.

The starting point for engagement is to develop transparent CGIAR system-wide principles and mechanisms to embrace the opportunities and manage risks related to engaging with the private sector. This report is not aiming to be prescriptive in nature; it seeks to put in place cornerstones for what could become CGIAR’s private sector engagement strategy, providing key points of attention and ideas for what such a strategy should involve.

Although this report has been explicitly commissioned to focus on the ‘for-profit’ private sector, other types of private sector are also considered (Box 3). Many of the lessons learned and recommendations made regarding not-for-profit private engagement are equally relevant – i.e., when working with individual smallholder farmers, livestock keepers, aquaculture farmers and fishers. In all cases, private sector enterprises themselves should be making investments in the innovations they receive; if they are given something for free, they will not be willing to pay for it at a later stage, meaning an innovation is not sustainable in the long run without donor funds.

This report has been commissioned within the framework of ‘market-led development’ in which businesses, government and civil society actors are seen as being equally responsible for sustainable development, and which is reflected in Agenda 2030 and the SDGs. There are legitimate critiques of this approach from academics and civil society actors,^{9,10} but these arguments are outside the remit of this report.

Approach

A section of text from the CGIAR 2030 Strategy document – ‘Partnerships with the private sector’ – (Box 2) was analysed by the authors. This analysis revealed five guiding questions on private sector engagement that this report will examine:

1. What are the expected benefits of private sector engagement?
2. What are the risks and challenges of private sector engagement?
3. What are key principles for private sector engagement?

4. What are the key mechanisms for private sector engagement?
5. What institutional actions should CGIAR take to make private sector engagement work?

In addition, the authors of this report have brought together perspectives and insights from two additional CGIAR strategy documents,^{11,12} as well as from foundational strategy documents on private sector engagement by the Food and Agriculture Organization of the UN (FAO), the UN Joint Inspection Unit (JIU) and the OECD-DAC. Where available and accessible, private sector engagement strategies from individual CGIAR centres were also taken into account.¹³ Our emphasis on ‘responsible’ engagement with the private sector aims to contribute to the overall CGIAR mandate and role – to deliver research and innovation for achieving the SDGs.¹⁴ In this context, ‘responsible’ refers to ethically acceptable, sustainable and socially desirable research and innovation outcomes.¹⁵

To validate the five guiding questions and outline for this report, a mini-symposium was organized on 8 September 2021 with representatives from both CGIAR and the Netherlands, including the full editorial team. Insights from the mini-symposium have been integrated into the key recommendations for action.

The next sections of this report address the five guiding questions highlighted above. Each section starts with a short overview of the existing CGIAR perspectives derived from strategy documents and policies, followed by additional insights sourced from the other foundational documents. This is followed by key recommendations for action.

The text is supported by 12 cases (see Box 4) that give examples of good practice or learning from private sector engagement. These were largely gathered organically, based on the authors’ knowledge and networks, further highlighting the need for more systematic mapping and documenting of cases as outlined in the recommendations.

Box 1: Background to the report

This report is motivated by the interest of the Government of the Kingdom of the Netherlands to strengthen CGIAR partnerships with the private sector. Encouraging innovation and scaling partnerships with the private sector have been strongly advocated for by the Netherlands in recent years. Because it is not clear yet how CGIAR intends to anchor private sector engagement within the new set up of the organization, this report was commissioned by the NL-CGIAR Strategic Partnership¹⁶ to support CGIAR in operationalizing its cooperation with the private sector. The lead authors (Sarah Cummings, Jana Koerner and Marc Schut) drafted the original text, which has been reviewed and added to by contributing authors (Rob Lubberink, Thai Minh, David Spielman and Janny Vos) and senior editors (Martin Kropff and Cees Leeuwis). In addition, considerable inputs and review have been provided by Coosje Hoogendoorn, Mariëlle Karssenbergh, Matieyedou Konlambigue, Gianpiero Menza, Elise Perset, Rodrigo Sara, Tonya Schutz and Frederick Schreurs.

Box 2: Partnerships with the private sector as described in the ‘CGIAR 2030 Research and Innovation Strategy’¹⁷

Recognizing that the private sector is essential to food system transformation, CGIAR will build interdependent relationships with small, medium, and large enterprises, as well as with private sector coalitions, to accelerate sector-wide progress. These partnerships, safeguarding our reputation as a trusted independent party, will not be simply a one-way channel for scaling technologies, but rather pivotal to market assessment, product design, and research implementation. CGIAR understands farmers, livestock keepers, and fishers as private sector constituents, and our research will support their focus on improving both short-term and long-term prosperity, working directly with farmers’ organizations. Bringing a business focus to our work is essential to bridge the gap between research, innovation and use, and impact at scale. To help bridge this gap, CGIAR will make systematic use of tools such as market research, product profiles, and stage-gated research management. CGIAR will develop mechanisms to act as a one-stop-shop for private sector enterprises, to enable co-discovery and sharing of solutions, co-creation of tools, sustainable and ethical sourcing, intellectual property rights (IPR), and transparent contracting. Demand-driven engagement with the private sector will include businesses in LMICs in South Asia, Southeast Asia and Latin America.

Box 3: What do we mean by the private sector in the context of this report?

In developing mutually beneficial relationships with the private sector, CGIAR needs to define what it means by ‘the private sector’. The current ‘CGIAR partner organization typology’ refers to different types of private sector, including foundations, banks and microfinance organizations, and specifically differentiates between the private sector from aid-providing countries, aid recipient countries, generally LMICs, and countries which are neither aid providers or recipients. It also includes social enterprises, namely companies or businesses that strive to maximize both profits and benefits to society and the environment.

This report focuses on engagement with formal private sector businesses and enterprises, ranging from multinational companies to local small- and medium-sized enterprises (SMEs), with an explicit focus on their innovation and scaling roles. It does not focus on engagements with individual smallholder farmers, livestock keepers and fishers, but does consider cooperatives and their formal networks and associations. In addition, we acknowledge that the definition of what constitutes the private sector is ambiguous and context-specific. Given this intrinsic complexity, it is not easy to come up with a set of simple rules for private sector engagement in a development context. Rather, principles and mechanisms need to be tailored and contextualized for different purposes, locations and private sector types. In all cases, it is advisable that the private sector itself is willing to invest in innovation.

Box 4: An overview of case studies

Case 1. Private sector investment combined with science-based information: Althelia Biodiversity Fund (ABF) Brazil

Case 2. Delivering climate information to farmers with a public-private partnership in Ghana: Esoko

Case 3. A traffic light system for managing risks of private sector engagement in nutrition: the CGIAR Research Program on Agriculture for Food and Nutrition (A4NH) example

Case 4. Principles for engagement with the private sector: the IFPRI principles used by other centres

Case 5. A CGIAR-One Acre Fund co-investment partnership in Rwanda

Case 6. IPR mechanisms for working with the private sector in plant breeding: the IRRI approach

Case 7. A PPP to strengthen maize breeding: International Maize Improvement Consortium for Africa (IMIC-Africa), CIMMYT

Case 8. An accelerator to support scaling of innovation: RTB Scaling Fund

Case 9. Private sector engagement to accelerate climate-smart agriculture: USAID Learning Community

Case 10. An institutional arrangement for scaling: the International Institute of Tropical Agriculture (IITA's) Business Incubation Platform (BIP)

Case 11. Combining scientific creativity, technological ingenuity, and entrepreneurship for transformative solutions: the Accelerate for Impact Platform (A4IP)

Case 12. An example of system-wide knowledge sharing: the CGIAR Intellectual Property community of practice



Question 1: What are the expected benefits of private sector engagement?

The private sector can contribute to the SDGs as fundraising, learning, demand, innovation and scaling partners.

CGIAR distinguishes three types of roles or functions that private sector partners are expected to play in implementing the CGIAR 2030 Strategy report. First, the private sector can have a specific demand, or may face a specific challenge to which CGIAR can contribute – as in the example of contract research. Second, the private sector can collaborate or co-invest with CGIAR in designing, testing and/or validating innovations. Third, the private sector can play a role as scaling partner in providing broader access to and use of innovations that have been developed by CGIAR. In reality, demand, innovation and scaling roles are often interrelated, and one single partner can play different or all roles as part of an innovation and scaling pathway.

Although this report builds on the CGIAR terminology of demand, innovation and scaling roles (Table 1), we recognize that the private sector itself may use other typologies, such as discovery (invention), development (innovation) and delivery (scaling). In addition, the private sector may play additional roles, such as fundraising, capacity development and learning partners.

Table 1: Private sector roles and functions

Private sector roles and functions	Description ¹⁸
Demand partner	Organizations or entities that have (expressed) an explicit or implicit demand for an innovation or who aspire to a specific goal or impact to which CGIAR can contribute.
Innovation partner	Organizations or entities with which CGIAR collaborates and co-invests to develop and improve the readiness of innovations to contribute to impact at scale. This includes partnerships on upstream science as well as more applied research and context-specific innovation testing, adaptation and validation. For example, CGIAR to give the innovation a ‘validation of the CGIAR quality’ as part of the product introduction strategy for the private sector.
Scaling partner	Organizations or entities that CGIAR collaborates with to advance the uptake and use of innovations at scale. This includes partnerships on advocacy for changing policy and business practices which may reproduce constraints to scaling and change. Scaling partners may work with CGIAR on achieving specific impacts, such as gender and social inclusion. Scaling partners may play a variety of roles such as intermediary, coalition partner, service provider, innovation delivery, etc.
Fundraising partner	Capitalize on new and innovative sources of funding, and build on good practices of resource mobilization, allocation, bundling and management. This includes partnerships with start-up accelerators and incubators who facilitate funding flow and investment for innovation and scaling.
Capacity sharing and learning partner	Exchange and learning between CGIAR and the private sector, aimed at aligning demand and supply and improving management and decision-making. This could include practical workshops through training which can be given at various levels.

For CGIAR, the ultimate benefit of private sector engagement is to increase the likelihood that innovations achieve impact at scale and contribute significantly to the SDGs.¹⁹ CGIAR’s strategy document recognizes that partnerships with the private sector are expected to accelerate innovation, system transformation, prosperity, bridge the gap between research and development (R&D), and improve efficiencies towards impact.²⁰ Engagement with the private sector is also expected to strengthen capacity in agricultural systems, for example through the development of joint training, exchange or service delivery programmes.²¹ Additional benefits include increased sustainability of investments and reduced dependence on short-term projects, but also access to new and innovative sources of financing, such as start-up, accelerator and impact investment funds (see Cases 2 and 8). The private sector is also expected to contribute to more efficient, sustainable scaling of innovations through the commercial market. Private players, including single companies or

sector associations, may also influence policy development and discourses. Innovations scale as part of bundles or packages²² that are likely to include both CGIAR innovations and private and public sector solutions.

When looking at other leading organizations in the research-for-development sector, benefits from private sector engagement are described in different ways. For FAO, mobilizing the capacities and resources of the private sector is seen as essential for achieving the SDGs. This is particularly the case for global agri-food systems where the private sector has an important role. The private sector is seen as a strategic development partner; offering innovative tools, resources, knowledge and technologies that are critical for reinforcing impact on the ground.²³ With the private sector, FAO aims to achieve ‘transformative change and innovation, as well as measurable, sustainable impact’.²⁴ The JIU report identifies several benefits of engaging with the private sector, including ‘making the United Nations system more effective [...] to support the 2030 Agenda and to foster sustainability in their [UN organizations’] business models.’²⁵ According to the North South Institute (NSI) in Canada, few development cooperation actors are strategically targeting their private sector engagements toward SMEs or larger firms in LMICs. The NSI considers that SMEs have the potential to have significant positive impacts on development outcomes due to their economic importance in LMICs.²⁶

Case 1. Private sector investment combined with science-based information: Althelia Biodiversity Fund (ABF) Brazil²⁷

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), together with the Centre for Tropical Agriculture (CIAT), supported Mirova Natural Capital and the United States Agency for International Development (USAID) in establishing ABF Brazil in 2019. The Fund aims to deploy USD 100 million of blended finance into sustainable activities that protect, restore or otherwise improve biodiversity and community livelihoods in the Amazon basin. The Fund is structured as a layered fund, with junior and senior share classes. The junior shares, a USD 15 million commitment from CIAT, provide first-loss protection to the senior shareholders.²⁸ This feature, together with a credit guarantee from the Development Credit Authority, and backed by USAID, provides an attractive risk proposition for private capital investors. Aside from CIAT's USD 15 million cornerstone investment, CIAT and CCAFS' research experience in the Amazon, and their technical capacity and knowledge to develop and evaluate sustainable practices and businesses, are key contributions to the Fund. The first ABF Brazil investments have already been developed and more are underway. In the face of declining development assistance budgets from donor countries and a USD 2.5 trillion annual financing gap to meet the SDGs, this combination of private sector investment and science-based information presents a promising strategy to secure the funds that are needed for sustainable development in the coming years.

Case 2. Delivering climate information to farmers with a public-private partnership in Ghana: Esoko^{29, 30}

Between 2011 and 2017, CCAFS West Africa piloted the dissemination of climate information services (CIS) to farmers in its climate-smart villages in Ghana to help them avert risks associated with climate change and variability. The pilot was executed with 1,000 profiled and geo-referenced farmers (33% women) through a collaboration with Esoko, a private information and communication technology company, and the Ghana Meteorological Agency (GMet). During the pilot, Esoko delivered processed weather information received from GMet and other sources to farmers using mobile phone

platforms. The Esoko platform also allows farmers to access a call centre where CIS is delivered to them orally in their local dialect.

To sustain CIS delivery to farmers at the pilot sites and reach others in the country, Esoko adopted a PPP business model proposed by CCAFS. The PPP connects private telecommunication companies with public institutions and has encouraged mass subscription to CIS through mobile phones, and is closely linked to Ghana's national Planting for Food and Jobs initiative. To foster more subscriptions, Esoko and Vodafone developed the Vodafone Farmers Club, a network of farmers benefiting from market information and climate information delivery services. Recent studies indicate that more than 300,000 farmers are currently being provided with CIS.³¹

Recommendations

Based on lessons drawn from the cases, we offer five recommendations designed to contribute to strengthening the benefits of private sector engagement for CGIAR.

- 1a. Engagement between CGIAR and the private sector needs to be based on **shared vision** and purpose because this enhances collaboration, co-investment and helps in overcoming obstacles.
- 1b. **Clarify functions, roles and expectations** for engagement with the private sector as demand, innovation, scaling, learning or fundraising partners. Although beyond the scope of this report, we also recommend clarifying the functions, roles and expectations of the informal private sector because of its important role in food security and nutrition. It would be important to be explicit about what kinds of benefits are expected from engaging with different types of private sector, and provide detail on how these benefits are expected to be achieved. This needs to be worked out in a contract with clear deliverables signed by the CGIAR scientists, business developers and the private sector partners involved in the project.
- 1c. Ensure that engagements between CGIAR and the private sector are **fit-for-purpose**. Not all innovation development and scaling need to come from – or happen – with the private sector. It would be constructive to ensure that engagement with different types of private sector does not become an objective in itself. Similarly, private sector engagement should not be forced upon CGIAR as this could create perverse incentives and is unlikely to result in the desired benefits.
- 1d. **Elaborate key commitments and targets** CGIAR would set itself in terms of strengthening engagement with the private sector. Although this could include details such as the number of formal engagements with different types of private sector, more appropriate commitments and targets might focus on outcome-oriented indicators – such as the percentage share of private co-investment in innovation, or the number of active exchange or learning events with private sector partners, to name just a few. Having a set of bold commitments and targets will ensure that CGIAR gets beyond aspirations and ambitions, and actively translates its strategy into purposeful engagement, deliverables, contracts and action.
- 1e. **Synthesize and learn** from successful and failed engagements between CGIAR and the private sector, employing communities of practice³² with members dispersed through CGIAR and external stakeholders to develop a set of best practices, guidelines and modalities.



Question 2: What are the risks and challenges of private sector engagement?

CGIAR engagements with the private sector should be diverse and innovative. Independence in science and advice should be safeguarded by a private sector engagement advisory board.

There are risks and challenges in engaging the private sector to deliver multiple benefits to agricultural research-for-development. These can include undermining local and national interests, disempowering public interest solutions, damaging the reputation and credibility of CGIAR, and potentially undermining the interests of the very poorest. Some of these are specifically related to food and agriculture and others are specific to organizations that have a global public good and public interest mission.

The efficiency benefits of working with the private sector can be threatened when the market is dominated by only one or a few powerful companies.³³ For example, the global seed and agrochemical industries are dominated by a handful of firms, potentially giving them multiple pathways to ‘... exert power – both directly and indirectly – that matter for food system outcomes: by shaping markets, by shaping technology and innovation agendas, and by shaping policy and governance frameworks.’³⁴ And such market concentration by multinational enterprises in the food industry has apparently had a negative impact on policies and innovation agenda setting.³⁵ There has

been critique of the role of the private sector in the 2021 UN Food Systems Summit, regarding the mainstreaming of corporate-led, environmentally harmful global food production,^{36, 37} and excluding less powerful groups who do not benefit from and are further marginalized by mainstream private sector products and services.^{38, 39} In addition, transnational companies are not always interested in working in LMICs; to address this gap, CGIAR is working with many SMEs in these countries to scale up innovations – as can be seen for crops like maize. Both the International Rice Research Institute (IRRI) and International Maize and Wheat Improvement Centre (CIMMYT) cases (Cases 6 and 7) show how arrangements are being made for IPR licences that can be used for investments in new crop varieties.

A 2006 study⁴⁰ considers that partnerships between the CGIAR and private multinational firms can be constrained by: fundamentally different incentive structures; prohibitive costs, both direct and indirect; mutually negative perceptions between the sectors; and high levels of competition and risk associated with valuable assets and resources. Primary impediments to PPPs were found to be perceptions of the private sector, competition and risk, while issues of costs and conflicting incentives are secondary. These findings indicate that investment in innovative organizational mechanisms and supportive public policies could facilitate more and more successful PPPs in pro-poor agricultural research. A 2010 survey of 75 CGIAR public-private projects⁴¹ suggests that while PPPs are changing the way the system manages its research agenda, relatively few partnerships have led to joint innovation processes with the private sector. This indicates the need for closer examination of organizational practices, cultures and incentives in the international agricultural research system. Other studies^{42, 43} may indicate that CGIAR struggles navigating relationships with state-owned enterprises/parastatals that may enjoy privileged positions in terms of industry structure, market power, and corporate strategic behaviour. In these cases, CGIAR's first priority should be to contribute to the development of competitive markets.

CGIAR has an additional role to play on the environmental conservation and sustainable agriculture front. By providing natural sciences expertise – particularly to corporations investing in crop and livestock production which contribute acutely to environmental degradation in vulnerable ecosystems and greenhouse gas emissions – CGIAR can help move private investment towards greater sustainability.^{44, 45} For example, commodity trading has been associated with deforestation,⁴⁶ biodiversity loss,⁴⁷ and violence.⁴⁸ CGIAR can support private sector organizations that are trying to be in balance with social-ecological systems.^{49, 50} Engagement with the private sector can also protect against risks related to climate, as shown in Case 2.

FAO has developed a detailed overview of the risks associated with private sector engagement, including: potential conflicts of interest; undue influence on FAO's work, particularly relating to policies, norms and standard-setting; the potentially negative impact on FAO's integrity, independence, reputation and mandate; the engagement being primarily used to serve the interests of the private sector entity, with limited or no benefit to FAO; engagement conferring an endorsement of the private sector entity's name, brand, product, views or activity; the failure of the partnership to provide the expected benefits; and blue-washing⁵¹ of a private sector entity's image through an engagement with FAO through deceptive marketing that overstates a company's commitment to responsible social practices.⁵² In addition, FAO has a clear set of exclusionary criteria for when it is prohibited from working with private sector actors. These criteria refer to business categories and practices considered incompatible with the values of the UN, its treaties, and other international standards.

For the UN as a whole, there is a similar set of guidelines that deal with the reputational risk of collaborating with the private sector, potential conflicts of interest, unfair advantage and loss of independence. However, the UN has generally dealt with these challenges by being extremely risk averse to the point of favouring no action at the organizational level.⁵³ In its advice, the OECD-DAC also recognizes that there are challenges related to private sector engagement, including respecting human rights, due diligence, supply chains, stakeholder engagement and the environment.⁵⁴ Despite these challenges, OECD-DAC recognizes that the private sector is often an agent of change and a potential partner for implementing the SDGs. While doing no harm and minimising risk of adverse impacts remain priorities, business strategies can align around the SDGs and galvanize action for development. Evidence from Asia, Latin America and Africa shows how private sector contributions not only stimulate economic growth but also can help implement the SDG agenda.⁵⁵ These projected contributions and their expected impact on the SDG objectives need to be formalized in a contract between CGIAR and the private sector partners.

CGIAR is undoubtedly aware of many of the risks and challenges as can be seen from Case 4, and has an important responsibility when engaging with the private sector. A recent evaluative report, however, indicates that CGIAR does not sufficiently shoulder this responsibility across the whole organization.⁵⁶ Due to the heterogeneity of organizations that constitute the private sector, CGIAR can form purposefully selected partnerships with business organizations to counteract the ongoing concentration and power of only a few market actors in the global food system. Given CGIAR's overall and long-standing commitment to responding to the interests of resource-poor, small-scale farmers in LMICs, CGIAR is also in a position to defend the interests of marginalized groups in partnerships with the private sector.

Case 3. A traffic light system for managing risks of private sector engagement in nutrition: the CGIAR Research Program on Agriculture for Food and Nutrition (A4NH) example

The complexities of interacting with the private sector in the area of nutrition are on CGIAR's radar. In 2017, the A4NH hosted an event on innovative ways for public and private-sector actors to work together in improving nutrition, and the opportunities and challenges associated with that.⁵⁷ Working with researchers from the International Food Policy Research Institute (IFPRI), the Institute of Development Studies, the University of Sussex, amongst others, A4NH explored these complexities in situations where large transnational corporations may have products and practices that address malnutrition or that may drive, exacerbate, or deliberately confound it.⁵⁸ This is an area of historical concern that has been highlighted by civil society organizations like Oxfam, among many others.⁵⁹ The event also gave researchers an opportunity to draw attention to initiatives, such as the Access to Nutrition Index's [Global Access to Nutrition Index](#), which provides companies, their investors and other stakeholders with ratings for the world's largest food and beverage manufacturers on how participating firms are contributing to malnutrition. While such indices may not go far or fast enough in translating pro-nutrition private sector rhetoric into action, other mechanisms can be considered, such as a 'traffic light' system that assesses risk and other factors resulting from private sector engagement.⁶⁰

Recommendations

We arrive at five recommendations from our analysis of managing risks and challenges associated with private sector engagement in CGIAR.

- 2a. Stimulate **diverse private sector engagements** with start-ups and SMEs that face the high costs for R&D. CGIAR can partner with the private sector to encourage greater competition in markets dominated by a small number of players, introduce alternative products and services that may even disrupt dominant market players and innovations, or support dominant players to reach markets that are otherwise underserved. Increasing market competition and the diversity of products and services available to farmers and other food system actors can contribute to reducing inputs costs, increasing productivity of crops and livestock, and decreasing vulnerability to shocks and crises.⁶¹
- 2b. CGIAR needs to support research innovations that **go beyond mainstream interests of private industry partners**. Many private sector incumbents in the global agriculture sector and food system maintain their market positions with a combination of technological, legal, and managerial strategies that do not necessarily cater to the needs of the millions of smallholder farmers in LMICs. In addition, these innovations may target specific client groups such as large-scale farms and male farmers, and promote environmentally-damaging farming practices. As such, their innovations tend to be inaccessible or inappropriate for other groups of beneficiaries, such as small-scale farms, women farmers, or farmers in fragile ecologies. This implies that potentially desirable alternative innovations may be lower or even absent in innovation agendas. CGIAR should include the specific market segments (e.g., target groups) in the contracts with the private partners.
- 2c. CGIAR could look for **new opportunities** for private sector engagement in various sectors of the global food system (e.g., inclusion of indigenous knowledge, degrowth, and alternative, public interest agricultural practices), and craft research agendas that respond to these blind spots.
- 2d. CGIAR must **play an independent role** in providing evidence on the consequences of industry structure, market power, and corporate strategic behaviour for agriculture and food systems. CGIAR should retain independence in decision support and policy making. Companies with significant market power exert influence in policy making through strategic corporate behaviour. This represents a challenge to the role of research and science in decisions and policy making. CGIAR will be an important actor in future policies that inform our global food system.
- 2e. CGIAR needs to recognize the important role it plays in **protecting the interests of marginalized groups**, such as women, poorer farm households and indigenous groups, in corporate, concentrated sectors, but also in global food system interventions. Since inclusion is central to the CGIAR mission, the main challenge will be to serve all groups but not necessarily with the same instrument. One of CGIAR's roles is to demonstrate the value of different groups and nudge the behaviour of private partners toward specific groups.



Question 3: What are key principles for private sector engagement?

Partnerships with the private sector should be based on the principles of transparency and interdependence, and they should be mutually beneficial, aligned with private sector approaches and demand.

Developing a set of principles or ground rules can be a useful way to support CGIAR in engaging with a broad variety of private sector partners in a way that is consistent with its global public goods and public interest mandate. CGIAR currently has principles for the management of intellectual assets, which were developed in 2012 and further approved in 2016. These principles underline that ‘CGIAR regards the results of its research and development activities as international public goods and is committed to their widespread diffusion and use to achieve the maximum possible access, scale, scope of impact and sharing of benefits to advantage the poor, especially farmers in developing countries’.⁶²

There are currently no established principles for CGIAR system-wide engagement with the private sector, although some CGIAR centres, such as IFPRI (see Case 4), have developed their own set of principles.⁶³ The current CGIAR transition process and restructuring provides an opportunity for developing consistent system-wide principles and guidance to embrace opportunities and maximize benefits from working with the private sector, while managing risks and challenges. In identifying the principles for interaction with the private sector, IFPRI notes the importance of transparency and

accountability; mutual respect and agreement; quality and ethics; and risk management.⁶⁴ Principles can also be developed for co-investment with the private sector, which is shown in Case 4. Cases 6 and 12 demonstrate how principles related to IPR form the basis of mechanisms of private sector engagement.

FAO has developed 10 principles for engagement with private sector, based on the Committee on World Food Security's 'Principles for responsible investment in agriculture and food systems.'⁶⁵ Engagement with the private sector aims to involve 'principle-based, purpose driven partnerships that deliver a meaningful impact that leaves no one behind,'⁶⁶ and working with the private sector as 'equal partners.' Many of FAO's principles can be adapted to fit the specific nature, scope and mandate of CGIAR; the full list is as follows:

1. Demonstrate a clear contribution to the attainment of the SDGs
2. Respect the values of FAO and the UN
3. Do not compromise FAO's neutrality, impartiality, integrity, independence, credibility or reputation
4. Be effectively managed and avoid any conflicts of interest or other risks to FAO
5. Demonstrate a contribution to FAO's mandate, goals and mission and the national development goals of its member states
6. Respect the intergovernmental nature of FAO and the decision-making authority of its country member states, as set out in FAO's constitution
7. Support and enhance, without compromise, the neutral and independent scientific and evidence-based approach that underpins FAO's work
8. Protect FAO from any undue influence, especially on processes for setting and applying policies, norms and standards
9. Be conducted based on transparency, openness, inclusiveness, accountability, integrity and mutual respect
10. Maximize local-level development impact and beneficiaries, particularly the smallholder farmers and their associations, as well as youth and women, respecting the principles of 'leave no one behind' and 'do no harm.'⁶⁷

In terms of governance, FAO has mechanisms to incorporate the priorities and interests of its member states (i.e., national governments), local and indigenous communities, and other stakeholder groups, and these mechanisms can be a safeguard against the potentially overwhelming influence of the private sector in conveying its own priorities and interests. For the UN, the emphasis is on 'find[ing] ways of improving the existing arrangements for cooperation with the private sector to reflect the new context, namely the holistic, integrative and universal approach of the 2030 Agenda.'⁶⁸ Private sector companies that do not meet the minimum acceptability criteria for engagement, such as human rights, labour rights, environment and good governance – as defined by the UN – are off limits on all accounts, and excluded from further consideration. In addition, CGIAR should actively work with private sector actors with a clear ambition to create global public goods and work in the public interest.

Case 4. Principles for engagement with the private sector: the IFPRI principles used by other centres⁶⁹

1. *Transparency and accountability* – IFPRI will publicly disclose all partners and funding sources. As a publicly-funded organization, IFPRI discloses its research projects and designs and publishes the results of all activities and evaluations and follows the Open Access Principles of the CGIAR.⁷⁰ Any engagement must further – not compromise – IFPRI’s mission. IFPRI does recognize the potential for achieving private benefits together with its public goods objectives. Clear objectives that are relevant and achievable, and measurable steps to assess achievement, need to be clearly articulated and communicated in any engagement with the private sector.
2. *Mutual respect and agreement* – IFPRI respects the independence and organizational missions of private sector entities and requires that its private sector organization partners respect IFPRI’s independence and its public good, research quality, and public transparency and accountability requirements. IFPRI will actively engage with interested private sector organizations to develop and clearly document in agreements their mutually agreed objectives, clearly defined roles and responsibilities, and agreements on these principles of engagement.
3. *Quality and ethics* – IFPRI will ensure that its quality standards for research are implemented in the design, monitoring, and assessment of joint projects. This includes, but is not limited to, registration of trial and study protocols, application of ethical reviews for research with human subjects, open access of data and results, and peer review of publications.
4. *Risk management* – IFPRI implements a due diligence process to identify and manage risks of engagement with private sector organizations and potential conflicts of interest. IFPRI will work with its partners in this process, including reviewing and updating risk assessment and management plans and procedures.

Case 5. A CGIAR-One Acre Fund co-investment partnership in Rwanda^{71,72}

Since 2017, CGIAR has collaborated with one of the largest agricultural input providers in Rwanda – the One Acre Fund,⁷³ which is a social enterprise providing seed, fertilizer and training to approximately 630,000 farmers in Rwanda. The collaboration is developed around a co-investment mechanism based on a principle of ‘you don’t pay us; we don’t pay you’. The collaboration focuses on supporting One Acre Fund to move beyond a one-size-fits-all approach and tailor their innovation packages and scaling strategies to key farm household typologies.

The co-investment partnership took almost a year to develop. This time is usually not available in short-term interventions, but is a key condition for developing more equal collaborations between CGIAR and its partners. Co-investment is more than just merging budgets. It is a safeguarding mechanism to ensure that CGIAR works on real demand, and that partners take co-ownership over the activities. Furthermore, co-investment created a more level playing-field for CGIAR and One Acre Fund to discuss, negotiate and agree on their joint agenda. Once agreements and co-investments are documented, the agility of projects increases. Co-investment also creates an enabling environment for the scaling of innovations, as approval for co-investment requires support and buy-in from business leaders and decision-makers.

Recommendations

There are four key recommendations that can contribute to developing a set of principles that can guide CGIAR in engaging with a broad range of private sector actors:

- 3a. An inclusive **consultation procedure**, following the FAO example, should be established to develop a set of broad principles for engagement with the private sector. This should involve sharing and building on the forthcoming CGIAR Engagement Framework, and existing guidelines and principles for engagement with the private sector within CGIAR.
- 3b. **CGIAR-private sector engagement principles** should include transparency and accountability, mutual respect and agreement, quality and ethics, and risk management. These principles should directly inform due diligence procedures which should include CGIAR boundaries (or no-go areas) for private sector engagement, such as activities that oppose the CGIAR mission and mandate or compromise CGIAR's reputation and integrity. These principles need to be firmly based on CGIAR's mandate for global public goods and working in the public interest. Here, 'Responsible Research and Innovation' principles could provide a useful framework.⁷⁴
- 3c. Principles should be operationalized into a set of **private sector engagement guidelines** that are tailored to private sector engagements with different types, sizes, technologies, markets, and contexts.
- 3d. **CGIAR IPR** management principles and guidelines should be updated to reflect the new ways in which CGIAR operates, to recommit to their fundamentals, and ensure full compliance by CGIAR. The IPR principles and guidelines maintain CGIAR's commitment to public goods, and they still provide exceptions (e.g., exclusivity arrangements) when no other solution is available. The IPR management should look at, and communicate without ambiguity, when exclusivity is necessary and how it should be granted, used, monitored, and evaluated. New knowledge, products and services developed as a result of partnerships between CGIAR and the private sector should be seen as public goods. Although with a clear agreement on deliverables, public goods in the form of IPR can be given out as a limited exclusivity to an external partner for a certain time and region, according CGIAR regulations and rules.



Question 4: What are key mechanisms for private sector engagement?

CGIAR and the private sector need to embrace and co-invest in novel mechanisms such as exchange programmes, impact funds, innovation hubs and scaling incubators to achieve their joint ambitions.

The partnership evaluation of CGIAR⁷⁵ found that although partnerships with the private sector have increased, engagement with large multinationals, in particular, has been slow. Barriers include different public and private interests, absence of mechanisms to deal with IPR, risk assessments and due diligence. According to the CGIAR System Management Office, appropriate mechanisms to work with the private sector are critical to CGIAR's mission and should be developed, mainstreamed and practised daily by the end of this first CGIAR System Business Plan period in 2022-2024. While CGIAR acknowledged private sector partnerships as a 'strategic opportunity for CGIAR to have impact at scale and contribute significantly to achieve SDG Targets', the mechanisms for private sector engagement identified in the recent 'CGIAR 2030 Research and Innovation Strategy' mainly focus on the private sector's role as an innovative funding source, and not so much on working with the sector as an innovation, scaling or learning partner.⁷⁶

Building on a framework developed by OECD-DAC, the table below proposes a set of potential engagement mechanisms for working with the private sector in different functions or roles.⁷⁷ The engagement mechanisms proposed are not complete or mutually exclusive, but provide a starting point for thinking about how to facilitate effective collaboration between CGIAR and different types of private sector. Some engagement mechanisms are more common place and their effectiveness has been studied (e.g., innovation platforms), whereas others (e.g., start-ups and scaling incubators) are newer to CGIAR and its partners, requiring exploration, testing and fine-tuning. Each of the engagement mechanisms comes with its own specific advantages and disadvantages, challenges and opportunities. The cases in this section of the report explains some of the mechanisms in more detail.

Table 2: Mechanisms for private sector engagement

Private sector roles and functions	Objectives for engaging with private sector	Potential engagement mechanisms
Demand partner	CGIAR research informs private sector strategic, tactical and/or operational decision-making and investment.	Commissioned or sponsored research by CGIAR; business advisory services; business roundtables on key themes, markets, technologies, policies, or geographies.
Innovation partner	Leverage private sector research capacities that contribute to CGIAR mandates and objectives.	Commissioned or sponsored research by private sector; bilateral or multilateral science and innovation public-private co-investment partnerships; innovation platforms; big data sharing collection using private sector data collection platforms.
Scaling partner	Impact at scale through partnerships that scale CGIAR innovation through private sector value chains, markets and broader advocacy activities.	Licensing and innovation transfer agreements; scaling incubators and hubs; bilateral scaling and delivery public private co-investment partnerships; joint advocacy for enabling conditions for scaling innovation; awareness campaigns and advisory services using private sector digital platforms.
Fundraising partner	Mobilize investment and capacity to tackle challenges that are obstructing both private sector and CGIAR in fulfilling its mandates and achieving its goals.	Traditional fundraising through grants; strategic engagement with investors and development banks; innovative finance mechanisms including accelerators, incubators, start-ups; challenge funds; blended finance; impact investing.
Capacity sharing and learning partner	Strengthen capacity of private sector and CGIAR to contribute to development impact.	Communities of practice; multi-stakeholder networks; learning labs; mentoring and exchange programmes; joint training programmes; and scholarship programmes.

For each specific situation, a fit-for-purpose mechanism needs to be identified that responds to the specific CGIAR-private sector objective – and this should avoid ‘silver-bullet’ thinking. For example, under the first phase of CGIAR Research Programs, innovation platforms were promoted as a mechanism to bring together research, development, business and government actors to develop and scale solutions to context or value-chain specific agricultural development challenges. In-depth studies showed that the effectiveness of innovation platforms⁷⁸ highly depends on the type of problem being addressed, and proposed solution, as well as the presence of existing partner networks in which agricultural stakeholders are already working together.^{79,80} It was concluded that, in some cases, bilateral PPPs could be much more effective, especially when the objective is to scale innovations.⁸¹ There are currently new partnership ‘hypes’ on the horizon, including Learning Labs or training workshops, Living Labs⁸² and other types of multi-stakeholder platforms. It is also probable that different mechanisms are needed for the various CGIAR ‘impact areas’ – as outlined in the introductory section of this report.

Case 6. IPR mechanisms for working with the private sector in plant breeding: the IRRI approach⁸³

Based on perspectives of IPR, IRRI has developed three mechanisms for working with the private sector, aligned with its mission. These include bilateral sponsored research, licensing partnerships and public-private consortia. These three mechanisms might also be more generally applicable across CGIAR.

1. Mechanism 1: Bilateral sponsored research

Private companies can commission research and will acquire certain rights to use the project’s deliverables, such as, for example, a non-exclusive or limited-exclusivity licence on the rice varieties produced, based on CGIAR’s ‘Intellectual Assets Principles.’⁸⁴

2. Mechanism 2: Private sector licensing partnership

In some circumstances, IRRI offers its assets to private sector partners. IRRI expects those licensing partnerships to provide impact acceleration, for example, introducing new rice varieties into the market at a faster pace. The private sector partner is expected to invest its expertise and resources in production scale-up, marketing and distribution of good-quality, elite seeds at an affordable price to farmers. Also, when appropriate, IRRI requests that the partner share revenue with IRRI and with public sector organizations, such as national research councils.

3. Mechanism 3: Public-private consortia

About 80% of the seed companies involved in hybrid rice are part of the Hybrid Rice Development Consortium. These companies pay a yearly membership fee which covers the cost of R&D performed by IRRI for the consortium. Public sector partners active in hybrid rice can join the consortium for free and access the results.

Case 7. A PPP to strengthen maize breeding: International Maize Improvement Consortium for Africa (IMIC-Africa),⁸⁵ CIMMYT

Launched by CIMMYT in May 2018, IMIC-Africa is a PPP designed to strengthen maize breeding programmes in Africa, and thereby improve African farmers’ access to high-quality, affordable, high-yielding and locally-adapted maize seed.

Any organization engaged in maize breeding for the African market is welcome to join the consortium, including national and international agricultural research institutions, and small, medium and large maize seed companies. Consortium members have access to early-generation maize

breeding material, an expansive hybrid evaluation network for robust evaluation of their products on various traits – and across diverse agroecologies, training and capacity development opportunities, and value-added research services offered at preferential rates.

The Consortium’s goal is to enhance the capacity of African maize breeding programmes, from both the public and private sectors, to develop elite maize hybrids with client-preferred traits (including abiotic stress resilience, disease and insect pest resistance, and high yield potential), for the ultimate benefit of farming communities across Africa. The Consortium provides members with access to CIMMYT’s early- and advanced-generation maize lines (breeding materials under development) to strengthen and diversify the germplasm used in their own breeding programmes. It also allows members to test their own pre-commercial maize hybrids in CIMMYT-led multi-location trials.

Case 8. An accelerator to support scaling of innovation: Roots, Tubers and Bananas (RTB) Scaling Fund^{86, 87}.

Between 2018 and 2020, the CGIAR Research Program on RTB hosted a Scaling Fund, which worked as an accelerator aimed to identify, fund, and support the scaling of eight RTB innovation packages aimed at improving seed multiplication, site-specific fertilizer recommendations, and pest and disease management, amongst others. The scaling investment of USD 8 million was expected to improve food security, household income, and nutrition for approximately half a million beneficiaries.

The RTB Scaling Fund tried to create a protected space for CGIAR researchers and public or private sector scaling partners to engage and develop a common understanding and joint objectives, and to develop and implement strategies for scaling innovations. One of the key mechanisms for eligibility among the innovation packages was having a co-investing scaling partner. This would help ensure real demand from the private sector, as well as a level playing field for agreeing on how and in what form the CGIAR innovation could fit in the public policy or private business model (see also Case 5 on co-investment in Rwanda). A protected space – such as that provided in the Scaling Fund – reduces risk and incentivizes CGIAR and partners to explore how to make scaling happen.

Recommendations

There are four key recommendations that can lead to the development of a set of mechanisms that can guide CGIAR in engaging with the private sector:

- 4a. Develop a CGIAR **inventory of existing mechanisms** for engaging with different types of private sector – recognizing that there is considerable, dispersed experience within CGIAR on which to build and learn. Some of these experiences and private sector engagement mechanisms have already been evaluated.
- 4b. Map and **tailor key principles and operational guidelines** for each private sector engagement mechanism, and monitor whether they work with different types of private sector in different contexts and regions.
- 4c. Explore and experiment with **novel engagement mechanisms** such as scaling incubators, innovation hubs, and co-investment arrangements to better understand how they can add value, what the risks are, and how to best institutionalize and manage such mechanisms across CGIAR.

- 4d. Explore whether **different mechanisms for different CGIAR impact areas** are needed. CGIAR could also innovate by developing new mechanisms that are adapted to their targeted 'action' and 'impact areas'. CGIAR's work is highly diverse, with the impact areas (e.g., job creation, nutrition, gender, climate and environment) and action areas (e.g., genetic innovation, resilient agri-food systems and system transformation) requiring different and specific mechanisms to address private sector engagement opportunities and challenges.



Question 5: What are the institutional actions needed for private sector engagement to work?

Private sector engagement requires dedicated human capacity, an organizational home and a mandate, as well as appropriate incentive systems within CGIAR.

The recent ‘CGIAR 2030 Research and Innovation Strategy’ considers how to make private sector engagement work. The recommendations of this document include:

1. Building interdependent relationships with small, medium, and large enterprises, and private-sector associations and coalitions.
2. Strengthening the business focus, including the systematic use of tools such as market research, product profiles and stage-gated research management. A business focus will help facilitate CGIAR’s engagement with the private sector.
3. Given that the CGIAR 2030 Strategy document calls for the development of a ‘one-stop-shop’ for private sector engagement, it is proposed that such a strategy facilitate and initiate private sector partnerships, including through the sharing of solutions, sustainable and ethical sourcing, IPR, and transparent contracting. The strategy should be a referral point for initiatives and individual researchers to use when preparing and formalizing contracts with the private sector. However, we propose that the one-stop-shop would be better envisaged as a central support service or a separate CGIAR service unit.

The one stop-shop will also evaluate, advise on, and build capacity around achieving the SDGs. It will be the organization's 'hub' responsible for vision identification and coordination of all tasks involved in private sector engagement.

The UN recommends a number of 'soft actions' to build relationships with the private sector, including staff exchanges with businesses, and publicly rating and rewarding companies for business models that address the 2030 Agenda for Sustainable Development.⁸⁸ This call for soft actions is consistent with bridging the communication gap between public and private sectors regarding their needs, roles and responsibilities in achieving the 2030 Agenda.⁸⁹ According to OECD-DAC, investments in human capacity are needed to support private sector engagement. This involves ensuring that adequate, trained personnel are available to facilitate engagements with the private sector – by investing in such on an ongoing basis. An effective approach to ensuring this aim is the establishment of specialized units where dedicated staff carry out capacity sharing activities, such as training, and provide support services to staff members responsible for private sector engagements.⁹⁰ Analysis should also be conducted to build, manage, and evaluate private sector relationships – in a way that will help develop value propositions to private companies.

To avoid misunderstanding between CGIAR and the private sector, clear communication mechanisms are required. Many scientists think that innovations developed with public funds cannot be scaled out exclusively with a private sector partner within a certain time and region, because this approach is not fully consistent with CGIAR's mission. And many private sector companies are only interested in scaling out a technology in return for limited exclusivity – to protect the investment they made in product introduction. Often, limited exclusivity is confused with open access. Information on an innovation is still available via open access channels, even when limited exclusivity has been provided for a certain time and/or region. If, in the funding of an innovation, it is indicated that the product cannot be scaled out via a limited exclusivity, CGIAR rules and regulations allow limited exclusivity of an innovation developed with public funding.

Case 9. Private sector engagement to accelerate climate-smart agriculture: USAID Learning Community⁹¹

In 2015, a CCAFS consortium launched the 'Climate-Smart Learning Community' as a community of practice to identify pro-poor climate-smart practices, technologies and policies, and, through cross-sector collaboration, develop and facilitate site-specific adaptation activities for cocoa farmers in zones that are differentially affected by climate change. The community provided certification training, curricula, and impact investment products. In 2017, with funding from USAID, private sector engagement was added to encourage concerted investment by the private sector to accelerate the adoption of climate-smart agriculture (CSA) practices by cocoa farmers.

The idea was to work directly with cocoa companies – where they would be active participants, rather than passive recipients of information – and together, acting on the basis of climate science, identify strategies consistent with private sector sustainability plans to incentivize their CSA investments. The Learning Community was explicitly meant to contribute science and learning into the USAID Climate-Smart Cocoa (CSC) initiative, which is led by the World Cocoa Foundation (WCF). This programme focused on the development of a CSC strategy for the private sector, and the pre-competitive piloting of CSC innovations.

A lesson learnt was that the private sector companies found it difficult to engage with many different members of the CCAFS consortium, and preferred working with WCF when translating the recommendations into practice. The consortium therefore intensified its collaboration with WCF in recognition of companies' preferences.

Transnational companies like Touton, Ecom and The Hershey Company (Hershey), have since leveraged decision-support tools produced by CCAFS, namely, climate suitability maps, the science underpinning a CSC manual with recommendations by impact zone, various CSA apps and climate-smart villages.⁹²

Case 10. An institutional arrangement for scaling: the International Institute of Tropical Agriculture (IITA's) Business Incubation Platform (BIP)^{93,94,95}

Located in Ibadan, Nigeria, at IITA headquarters, BIP is hosted under IITA's Partnerships for Delivery Directorate, which is dedicated to delivering innovations at scale to end users. BIP hosts pilot factories and provides an enabling environment for researchers and entrepreneurs to commercialize key IITA innovations, such as Aflasafe (a biopesticide),⁹⁶ NoduMax (a legume inoculant),⁹⁷ GoSeed (improved seed varieties, both vegetative and generative), and AgriServe (consultancy and farm management support and out-grower systems). BIP, set up in 2013, serves to stimulate product development and provide expertise and training to start-ups on commercial agriculture and farm management, and opportunities for market expansion. In order to deliver these services, BIP works to identify pioneering technologies and develop partnership agreements to leverage their potential; refine the technologies into products and carry out test-marketing; train partners in manufacturing and marketing; and replicate these operations in other countries.

BIP supports the commercial scaling of CGIAR innovations in breeding and variety development, genetics, cultivation techniques, plant health, disease control and biopesticide development, growth stimulation, and vegetative and generative seed systems. BIP is financially independent from IITA, and revenues generated are reinvested in research and in the incubation and commercialization of new products and services coming from CGIAR.

Since April 2019, IITA BIP became an independent company that is 100% owned by IITA. IITA BIP Ltd. has its own board and bank accounts. The company was set up to avoid unfair competition with local companies, encourage local scientific and business capacities to flourish, and protect IITA financially.

Case 11. Combining scientific creativity, technological ingenuity and entrepreneurship for transformative solutions: the Accelerate for Impact Platform (A4IP)^{98,99}

Since 2020, the Alliance of Bioversity International and CIAT have been investigating new business models to connect scientific products to markets – and create demand – by liaising with the actors operating in the innovation ecosystem. Building on CGIAR's legacy of research and innovation, and with initial funding from the Italian Ministry of Foreign Affairs, the Alliance launched A4IP in 2021 as a 'venture space' aiming to bring science and entrepreneurship together to co-design disruptive technologies at the nexus of agriculture, environment and nutrition. A4IP strives to scale high-potential existing research products, and stimulate the most visionary teams working on cutting-edge research areas to frame their game-changing solutions and take them to market.

A4IP is articulated around three pillars: 1) Leverage existing knowledge products and services, 2) Co-design and launch novel transformative innovations that target neglected areas of opportunity, 3) Nurture an entrepreneurial mindset and market-oriented approach to support the institutionalization of innovation processes at Alliance/CGIAR.

In 2021, A4IP engaged in several activities, including the global Agrobiodiversity Innovation Challenge,¹⁰⁰ which received 350 submissions involving 1,050 start-ups representing 76 countries. A4IP also organized the Agri-Food Tech Innovation Forum¹⁰¹ in November 2021 on ‘The Role of Venture Capital in Agricultural and Food Systems: Creating Opportunities and Scaling Up Science-Based Innovations,’ supported by many companies, foundations and donors, attracting an audience of 1,100 participants.

Case 12. An example of system-wide knowledge sharing: the CGIAR Intellectual Property Community of Practice

Launched in 2013, the CGIAR Intellectual Property Community of Practice¹⁰² is a forum intended to promote effective management of IPR and intellectual assets. The role of the forum is critical for CGIAR to maximize the global accessibility, scaling up and impact of its innovations and other research outputs. The Community is composed of focal points designated by each CGIAR legal entity¹⁰³ as the primary point of contact for reporting and compliance under the CGIAR Principles on the Management of Intellectual Assets.¹⁰⁴

The Community has convened for an annual meeting most years, complemented by virtual meetings to promote information sharing, leveraging best practices, tools, experience and training, and supporting the development and implementation of policy and guidance materials. Reporting by focal points forms the basis of annual CGIAR reports on the management of intellectual assets.¹⁰⁵ This reporting includes coverage of arrangements involving restrictions to global access permitted under the aforementioned principles and these typically involve private sector partners as can be seen in Table 3.

Table 3: Overview of arrangements involving restrictions to global access reported by CGIAR legal entities, 2012-2020

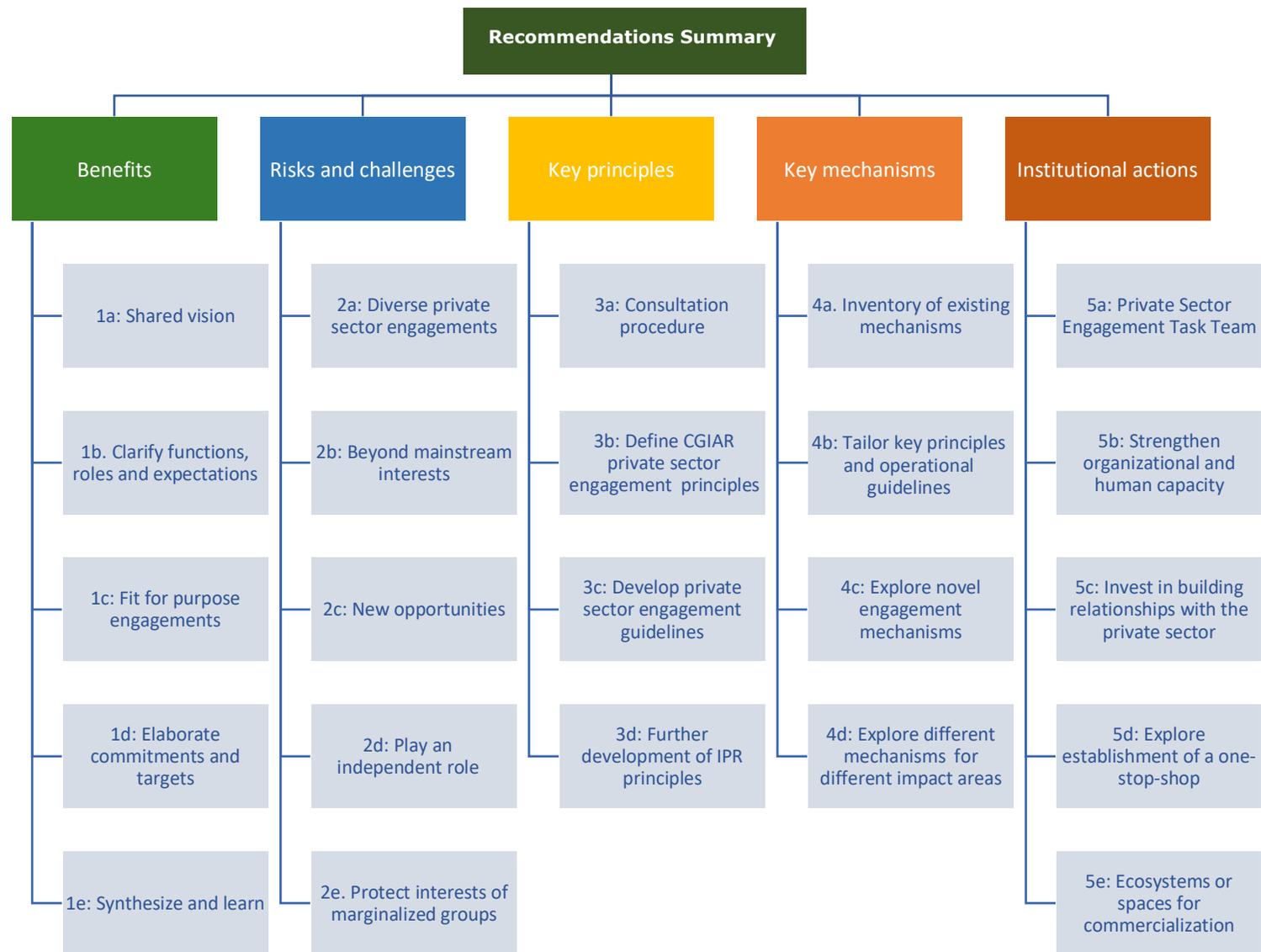
Intellectual property arrangements	2012	2013	2014	2015	2016	2017	2018	2019	2020
Limited exclusivity Agreements (i.e., licensing of CGIAR intellectual assets to third parties for commercialization on an exclusive or semi-exclusive basis)	7	7	4	0	4	23	73	87	35
Restricted use agreements (i.e., licensing of restricted third-party intellectual assets)	8	3	1	0	0	5	5	2	0
Patent applications*	0	6	6	4	8	5	1	5	4
Plant variety protection applications	0	3	0	0	0	0	5	0	1

* Certain patent applications may trigger reporting over several years.

Recommendations

There are five key recommendations towards developing an enabling institutional environment for making private sector engagement work for CGIAR.

- 5a. Establish a responsible **Private Sector Engagement Task Team** consisting of key CGIAR, private sector and external stakeholders and experts that are given a clear mandate to develop a vision, strategy and operational plan for CGIAR private sector engagement across organizational levels. The Task Team could operationalize some of the recommendations made in this report, and should build on existing CGIAR experience and policies for private sector engagement. The Task Team role could be temporary or evolve into the one-stop-shop (see recommendation 5d).
- 5b. Invest in **strengthening organizational and human capacity** to effectively engage with the private sector. CGIAR should hire private sector engagement experts who both understand the CGIAR and private sector world and can build bridges, capacity and provide training. Such capacity can also include legal expertise to advise on complex IPR and partnership issues. More generic system-wide capacity development of CGIAR staff and partners on the opportunities and risks of private sector engagement should also be considered.
- 5c: Invest in **relationship-building functions** with the private sector, such as staff exchanges to bridge the communications gap and lack of understanding between CGIAR and the private sector. This relationship building should reflect the broad variety of private sector actors that CGIAR aspires to work with, from multinationals to farmer networks and organizations.
- 5d: Explore the establishment of a **one-stop-shop for private sector engagement** without losing entrepreneurship throughout the organization. The one-stop-shop could host various support roles and functions in CGIAR in an integrated way, including:
- Hosting a **private sector engagement think tank and advisory board** – both of which are common practice in social enterprises – to ensure the independence of CGIAR, and prevent ‘mission drift’. The think tank and advisory board should represent different groups of CGIAR stakeholders and could monitor private sector partnerships to ensure that the innovation agenda, market activities and policy making align to CGIAR’s mission and that outcomes benefit CGIAR target beneficiaries.
 - Support **knowledge data management** to map, document and share lessons and approaches, as well as highlight good practices, evaluating principles, operational guidelines and mechanisms for private sector engagement.
 - Facilitate a **community of practice** as part of the knowledge management strategy. The community should involve people with expertise from across CGIAR as well as people with experience and background in the private sector. The community, with a facilitated online platform and with regular face-to-face meetings, could function as a sounding board for exchanging experiences and developing a learning agenda.
- 5e: Nurture **ecosystems or spaces for commercialization** by creating incubator, accelerator and financing platforms to support innovation scaling with the private sector.





Next steps

The CGIAR reform represents an opportunity for increasing private sector engagement, learning from current approaches, sharing capacity and bridging knowledge gaps.

For CGIAR engagement with the private sector to effectively contribute to and benefit from innovation and scaling, both CGIAR and the private sector need to be 'open for business' in support of broad food systems transformation. This will require learning from CGIAR's already considerable experience of working with the private sector, but it will also require building capacity of CGIAR staff and closing knowledge gaps within the CGIAR and the private sector related to their collaboration. It will require change from both partners; but the potential and opportunities are enormous. Meeting this challenge will require a consultation and planning process for increasing and improving CGIAR's engagement with the private sector.

We propose three immediate next steps:

Step 1: An organizational approach

An essential first step will be to identify how the roles, responsibilities, mandates, resources and facilities for private sector engagement are distributed across CGIAR to take this process forward. The current CGIAR organogram includes a 'Partnerships and Advocacy Global Group', which hosts the

Private Partnerships for Impact Department under the Global Engagement and Innovation Division. The Private Partnerships for Impact Department will lead work on capacity sharing for effective engagement with the private sector, support services for scaling and innovating modes of technology transfer, venture-focused R&D programming, and the design and deployment of a sustainable finance function. It is essential that the consultation and planning process for increasing and improving CGIAR's engagement with the private sector has a clearly defined organizational approach.

The Private Partnerships for Impact Department will have responsibility for more of the 'hard' management functions, such as planning, setting up procedures and knowledge management structures, and monitoring and evaluating performance. These functions should include a help desk function, covering legal and other components, and mainstreaming data collection, policies and procedures, including standard due diligence procedures. In addition, it should provide more 'soft' functions which should encourage knowledge sharing across the whole organization. For example, a system-wide community of practice to share experiences and best practices could take on part of this function, as well as answering questions in real-time about collaboration with the private sector. Such a community could also form the focus of capacity sharing and training activities related to engagement with the private sector.

Step 2: Mandated task force

A second step would be to develop an intermediate but clearly mandated task force and consultation process to discuss the recommendations of this report and receive wider inputs. This would mean consulting both internal and external stakeholders, including different types of private sector partners that CGIAR works with or wants to work with in the future. Here, it would be essential to acknowledge and cover the broad variety of private sector engagements in CGIAR. Learning from private sector engagement in other research-for-development sectors could be useful. In this consultation process, national stakeholders in partner countries should also be consulted, such as local and national government and particularly national agricultural research institutes.

Step 3: Strategic action plan

A third step would be the development of a strategic action plan for private engagement, developed under the Partnership and Advocacy Global Group by the mandated taskforce. This should include phased, planned and funded activities covering the different one-stop-shop functions, including: capacity development that involves training modules and learning sessions so that experiences and approaches can be shared more widely throughout the whole of CGIAR; legal, think tank and monitoring, evaluation and learning functions that develop system-wide due diligence procedures, innovative CGIAR-private sector partnership models, IPR-based approaches, and monitoring and evaluation systems for private sector engagement; and venture-focused programmes that include business incubation and acceleration initiatives that co-design, co-develop, and scale market-ready innovations with private sector partners. Knowledge management should involve putting the human and technical infrastructure in place to provide an inventory of past and current, tacit and documented experiences of private sector engagement, providing the basis of future interactions between CGIAR and the private sector.

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Acknowledgement

The lead authors, contributing authors and senior editors hugely appreciate the inputs, review and support that they have received from Coosje Hoogendoorn, Mariëlle Karssenbergh, Matieyedou Konlambigue, Gianpiero Menza, Elise Perset, Rodrigo Sara, Tonya Schutz and Frederick Schreurs.

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