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# 2024 CGIAR Intellectual Assets Management Report



ICARDA's technician team making grasspea crosses at research station in Amlaha, India.

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# 2024 CGIAR Intellectual Assets Management Report

This annual report is published under the [CGIAR Principles on the Management of Intellectual Assets](#) (CGIAR IA Principles, effective 7 March 2012), which govern how the CGIAR Centers and the CGIAR System Organization manage intellectual assets<sup>1</sup> to maximize their global accessibility by and impact on target beneficiaries in furtherance of the CGIAR's Vision.

The CGIAR IA Principles establish a comprehensive reporting and oversight framework, culminating in an annual report on implementation of the intellectual assets management framework over the preceding year. They also define the role of the System Council Intellectual Property (SC IP) Group<sup>2</sup>, which evaluates the CGIAR Centers' annual intellectual assets reports to assess compliance. These assessments form the basis of the consolidated annual intellectual assets report.

All annual CGIAR intellectual assets reports issued since 2012 can be accessed [here](#).

## Highlights

### CGIAR contribution to global agreement on genetic data governance

CGIAR played a key role in the adoption of a landmark international decision to operationalize a multilateral benefit-sharing mechanism for digital sequence information (DSI)<sup>3</sup>. Adopted at the United Nations 16th Conference of the Parties to the Convention on Biological Diversity (COP16), [Decision 16/2: Digital Sequence Information](#) reflects key elements championed by CGIAR and grounded in scientific evidence shared over two years of negotiations. The Decision includes both monetary and non-monetary

benefit-sharing measures, aligned with other international frameworks, and safeguards the continued use of DSI in agricultural research and development to benefit farmers and consumers in developing countries.

### Bolstering tailored intellectual property use through capacity sharing in the Global South

CGIAR Centers collaborated with organizations from the Global South to share knowledge and expertise on intellectual property (IP) management, aiming to build a shared understanding of IP systems and regulatory frameworks. These efforts supported the use of agricultural biodiversity to develop

context-specific innovations and promote sustainable growth. Notable initiatives include ICRISAT's training programs on fostering innovation and commercialization in Africa, as well as on the challenges of implementing IP laws and policies globally. Similarly, CGIAR Centers in Latin America and the Caribbean provided training to national genebanks on the legal and policy frameworks governing access to, transfer of, and use of crop resources and derived genomic data.

### Intellectual property rights and agreements restricting global accessibility as reported by CGIAR Centers for 2024

CGIAR Centers reported:

- Two patents granted on the same invention
- Four trademarks registered in multiple countries
- One granted industrial design
- Forty-one commercial licenses as limited exclusivity agreements, and
- One restricted use agreement

The justifications provided by CGIAR Centers for the reported IP rights and restrictive agreements were deemed acceptable by the CGIAR System Organization<sup>4</sup> and the SC IP Group according to the criteria as outlined in the CGIAR IA Principles.

1. "Intellectual assets" means any results or products of research and development activities of any nature whatsoever (including, but not limited to, knowledge, publications and other information products, databases, improved germplasm, technologies, inventions, know-how, processes, software, and distinctive signs), whether or not they are protected by IP rights.

2. The SC IP Group is formed by external experts in the intellectual property area, nominated by the CGIAR System Council. For more information on the SC IP Group see Annex 2.

3. Although there is no internationally agreed-upon definition, digital sequence information (DSI) broadly refers to detailed genetic data obtained by sequencing the DNA-based or RNA-based genomes of a plant, animal, fungi and microbial organisms.

4. With expert participation, advice, and feedback from the Genetic Resources Policy Group of the CGIAR Genebanks Accelerator in all aspects dealt with in this Intellectual Assets Management Report.



CGIAR participation at the Working Group on the Enhancement of the Multilateral System of the International Plant Treaty in April 2024.

Attribution: Photo by IISD/ENB | Anastasia Rodopoulou

# CGIAR and global genetic resources policy

The International Treaty on Plant Genetic Resources for Food and Agriculture (International Plant Treaty) defines rights and obligations for stakeholders - farmers, research organizations, non-government organizations, plant breeders, seed companies, and governments – regarding the conservation, use and benefit sharing of Plant Genetic Resources for Food and Agriculture. CGIAR is fully committed to its implementation<sup>5</sup>. Other relevant international frameworks to CGIAR work include the UN Convention on Biological Diversity (CBD), its associated Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization ([Nagoya Protocol](#)), and FAO's Commission on Genetic Resources for Food and Agriculture.

The CGIAR's Genetic Resources Policy Group, under the [CGIAR Genebanks Accelerator](#), coordinates engagement in these international fora. It advises CGIAR leadership on strategy and policy risks, consults broadly with CGIAR scientists and leaders, and receives direction from the CGIAR Center General Directors and the Integrated Partnership Board.<sup>6</sup>

- Decoupling benefit sharing obligations from tracking specific uses of genetic resources and DSI; and
- Ensuring consistency with open access to DSI.

Negotiations are expected to conclude in November 2025, when the Governing Body is expected to adopt a revised framework.

## CGIAR contributions to the CBD decisions on Digital Sequence Information

Ahead of the COP16 in November 2024, CGIAR spent two years participating in events and in an [informal advisory group](#) on DSI access and benefit sharing. With deep experience using DSI for crop and livestock improvement and agrobiodiversity conservation, CGIAR played a key role in shaping discussions relevant to agricultural research.

In collaboration with the [International Plant Treaty Secretariat](#) and the [DSI Scientific Network](#), CGIAR helped design a multilateral mechanism for DSI benefit sharing that supports research while promoting fairness and equity. The [Decision 16/2: Digital Sequence Information on Genetic Resources](#) adopted at COP16, includes in the multilateral mechanism several long-advocated elements by CGIAR.

## CGIAR engagement in the enhancement of the Multilateral System of the International Plant Treaty

In 2024, CGIAR submitted reports and actively contributed to the discussions of the Ad Hoc Open-ended Working Group to Enhance the Functioning of the Multilateral System (MLS)<sup>7</sup>. Negotiations to enhance the functioning of the International Plant Treaty's MLS of access and benefit sharing relaunched in 2022. Key areas under negotiation include modifications to the Standard Material Transfer Agreement (SMTA),

especially around monetary benefit sharing, and expanding MLS coverage to all crop genetic resources.

During the 2024 sessions, CGIAR's evidence and advocacy informed proposals such as:

- Allowing 'direct use in production' of materials accessed through the MLS;
- Requiring disclosure of MLS materials and their sources in patent and other intellectual property rights filings involving related inventions or DSI;
- Alignment with the CBD's DSI benefit sharing rules to prevent double payments;

5. As per Resolution 4/2017, available in the Report of the Seventh Session of the Governing Body of the International Plant Treaty, accessible [here](#)

6. See Annex 3 of this annual report for a list of the Article 15 Centers. Article 15 Centers refers to Article 15 of the International Plant Treaty calling on the "International Agricultural Research Centers of the CGIAR to sign agreements with the Governing Body" of the International Plant Treaty to place *ex situ* collections of plant genetic resources for food and agriculture held in trust by the CGIAR Centers under the purview of the International Plant Treaty. Such *ex situ* crop-related resources are available according to the terms and conditions of this international regulatory instrument.

7. In 2024, the 11th and 12th sessions of the Ad Hoc Open-ended Working Group to Enhance the Functioning of the Multilateral System and at the Fifth Meeting of the International Plant Treaty's Ad Hoc Technical Expert Group on Farmers' Rights took place. Detailed information on reports' submissions and presentations made by CGIAR as part of its work at the Ad Hoc Open-ended Working Group can be found [here](#)

The multilateral mechanism provides for the [Cali Fund](#), a global pooled fund for benefit sharing from commercial DSI use. Besides promoting the multilateral approach, CGIAR supported payments based on aggregated commercial values. The Decision recognizes and advocates alignment with other multilateral benefit sharing schemes, like the one under discussion within the International Plant Treaty, which CGIAR actively supports.

Decision 16/2 also recognizes non-monetary benefit sharing, such as capacity-building, knowledge exchange, and technical cooperation on DSI, which are core to CGIAR's mission. CGIAR also advocated open access to DSI, with minimal restrictions to databases use, and compliance with benefit sharing laws through data depositors' declarations, all of which are reflected in the Decision.

**In October 2024, Astrid Schomaker, CBD Executive Secretary, said:**

“ The negotiations that led to the operationalization of the Multilateral Mechanism on DSI, including the Cali Fund, by COP 16 were supported by a broad base of multistakeholder engagement. **CGIAR** has conveyed the plural perspectives of agricultural research eloquently and made a remarkable contribution to forging consensus in Cali at the most vibrant and inclusive COP in the history of the Convention.”



The interior of the Mangoase community seed bank. Credit: ©2024Biodiversity International/R. Vernooy

# Farmers' rights

Article 3 of the CGIAR IA Principles affirms the vital role of farmers, Indigenous communities, and scientists in conserving and improving genetic resources. CGIAR Centers must respect national and international efforts to uphold farmers' rights as outlined in the International Plant Treaty and support the development of appropriate policies and procedures for their recognition and promotion.

The [Implementation Guidelines](#) of the CGIAR IA Principles call on CGIAR Centers to promote farmers' rights, regardless of the existence of national legal frameworks, through the protection of traditional knowledge relevant to plant genetic resources for food and agriculture; ensure equitably benefit sharing with farmers; enabling their participation in decision-making on matters related to the conservation and sustainable use of crop resources; respecting the farmers' right to "save, use, exchange, and sell farm-saved seed/propagating material, subject to national law and as appropriate" (as stipulated by Article 9 of the International Plant Treaty).

Practically, this entails CGIAR Centers sharing research results with farmers on their crop resources and involving farmers as partners in research and development projects, with support to strengthen their capacity for meaningful participation.

According to reports reviewed by the CGIAR System Organization and the SC IP Group, CGIAR Centers have upheld farmers' rights as defined in the CGIAR IA Principles and the International Plant Treaty. Notable efforts include using the tricot methodology in crop improvement, establishing community seed banks, and characterizing traditional barley varieties to develop value-added products.

## Participatory approaches to crops research and breeding

Over the past three years, CGIAR Centers have emphasized collaborative crop, forage and tree breeding, fostering shared ownership and clear division of labor among partners. Farmers play a greater role in setting breeding priorities and in testing, validating, and adopting agricultural innovations.

The Tricot method (Triadic comparison of technologies) engages farmers as 'citizen scientists' to test and evaluate crop varieties and related technologies under local conditions. After training from CGIAR scientists, National Agricultural Research System (NARES) organizations, non-governmental organizations and development agencies, farmers manage crop trials, assess varieties, and help select candidate varieties for further testing or release. The Tricot method has supported breeding efforts for common bean, durum wheat, and bread wheat in Nicaragua, Ethiopia and India, and is now widely used in root and tubers' improvement programs in countries like Ghana and Nigeria.

While Tricot is becoming mainstream, limited awareness among CGIAR staff of its relevance to farmers' rights explains its underreporting in CGIAR Centers' annual intellectual assets report.

## Helping farmers conserve diverse crops through community seed banks and on-farm methods

CGIAR Centers have helped establish community seed banks for the conservation and sustainable use of local crops. In Ghana, the Alliance of Bioversity and CIAT and the Neglected and Underutilized Species Network of Ghana, with the support of the Netherlands Embassy in Ghana, set up the Mangoase Community Seed/Field bank in Adawso. The local farmers manage and conserve seeds from their fields, including root and tuber crops, cereals, legumes, and bananas, the latter through on-farm conservation. To engage youth and support the bank's long-term sustainability, students from the Mangoase Senior High School formed an 'agrobiodiversity fan club', participating in collection, cleaning, storage, and registration of seeds donated by local farmers. The club also engages in education and fundraising activities. The school staff, the Ghana Neglected and Underutilized Species Network and the Alliance of Bioversity and CIAT are also developing a curriculum module on community seedbanks management for the school. More details can be found [here](#).

## Deepening knowledge on traditional barley landraces

ICARDA and NARES from Ethiopia, Morocco, and Tunisia are working with local farmers to explore quality traits of native barley landraces for high-value product development. Funded by the International Benefit

Sharing Fund of the International Plant Treaty, the project involves selecting landraces for genomic, agronomic and nutritional assessment. Based on the findings, the farmers will receive support to develop local barley products (see Box 1 for more information on this project).

### Box 1: Farmers' Rights example: "Assessment of barley quality traits from indigenous landraces from Ethiopia, Tunisia and Morocco with funds from the International Benefit Sharing Fund of the Plant Treaty".

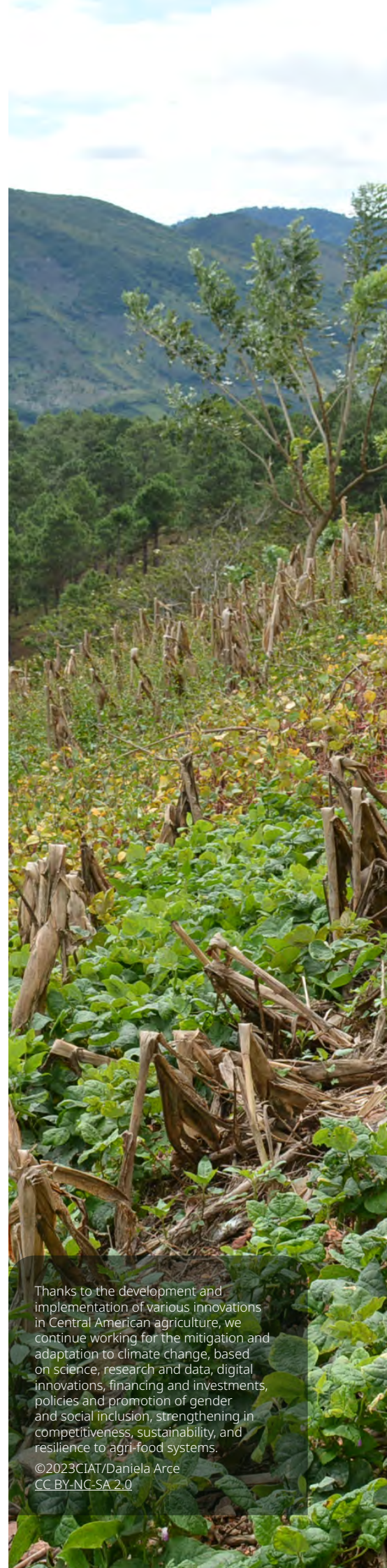
Exploring barley quality traits of indigenous landraces grown by local farmer communities in Ethiopia, Morocco and Tunisia to generate high value products is the goal of this farmer-centered project, carried out with funds of the International Benefit Sharing Fund of the International Plant Treaty.

The Genebank of the National Agricultural Research Institute of Morocco, the National Agricultural Research Institute of Tunisia, the Ethiopian Biodiversity Institute, and ICARDA are working with local barley grower communities to select landraces for genomic and nutritional assessment. Barley landraces held at ICARDA's ex situ collection, with associated genomic and quality information, will be added to the pool of resources to choose from. The genotypic profile of the selected landraces will be matched with elite grain quality traits and will be certified for specific use, such as high nutritional value, high digestibility, and appropriate malting parameters.

Knowledge and crop genetic resources exchanges among the rural communities and with the national agricultural entities and ICARDA will help farmers to develop local barley products. The partners envision to set up panels with diverse stakeholders to pilot "certification schemes" studies to ensure products' uniqueness and optimum quality.

The partners also plan to develop a versatile digital tool that will host the information generated on quality and genomic data analysis of barley landraces to be used by the local farmers, thus enabling them to access information and enhance their income through the easy selection of suitable barley germplasm.

Farmers' indigenous landraces will be included in the MLS of the International Plant Treaty, adding to the barley resources held at ICARDA's genebank, already under the purview of the International Plant Treaty. The information gathered on the landraces will be uploaded to the Global Information System managed by the UN Food and Agricultural Organization. In addition, barley germplasm will be safely duplicated in the Svalbard Global Seed Vault.



Thanks to the development and implementation of various innovations in Central American agriculture, we continue working for the mitigation and adaptation to climate change, based on science, research and data, digital innovations, financing and investments, policies and promotion of gender and social inclusion, strengthening in competitiveness, sustainability, and resilience to agri-food systems.

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# Intellectual property rights

Under the CGIAR IA Principles, CGIAR Centers are required to manage IP rights<sup>8</sup> responsibly and strategically to advance the CGIAR Vision, in line with applicable laws and best practices<sup>9</sup>. This includes upholding integrity, fairness, equity, and accountability<sup>10</sup>. The use of IP rights must support broad and timely dissemination of research results, with exclusivity only when necessary—and then limited in scope, duration, and geography. Assets protected by IP rights should remain available for public sector research and, when relevant, accessible in food security emergencies<sup>11</sup>.

When acquiring third-party IP, CGIAR Centers must ensure that use conditions are not unduly restrictive or as restrictive as equivalent property rights available through other parties, and that resulting outputs align with the CGIAR's mission. While registered IP rights are recognized as tools to attract investment and protect innovation, CGIAR Centers must balance incentives for the development of protected assets with their wide accessibility<sup>12</sup>.

## Patents

Patents protect new, useful, and inventive ideas—including devices, processes, substances, and biological materials—by granting exclusive rights for 20 years within the jurisdiction of issue. In return, inventors must fully disclose the invention to enable replication by others.

Following the CGIAR IA principles, CGIAR Centers generally avoid seeking patents unless it is necessary to enhance the development or impact of their innovations. When patents are pursued, they are exercised in ways that minimize restrictions while enabling investment and scale. CGIAR Centers' justifications for patenting vary: in developed countries, patents may deter free-riding and support revenue generation for reinvestment in technology development; in developing countries, they may help ensure that products benefit smallholder farmers. Centers often apply differentiated licensing strategies, offering royalty-free or no-cost access to public sector users and smallholders.

Patents filed by CGIAR Centers cover innovations such as vaccines, planting and breeding methods, and agronomic traits. For crop-related patents involving materials from the International Plant Treaty's MLS, Centers ensure compliance with the SMTA. This includes maintaining access to native traits and sharing monetary benefits with the Benefit-Sharing Fund of the International Plant Treaty, when commercialized products restrict further use for research, breeding, or training.

CGIAR Centers did not report filing any new patent applications in 2024. However, IRRI reported two newly granted patents – one in India and one in the Philippines - for an invention disclosed around 6 years before. The two patents of the same family relate to an invention for producing cytoplasmic male sterile rice with an introgressed long stigma trait of *Oryza longistaminata*. These rice lines show higher outcrossing rates and are capable of increased hybrid seed production. A related U.S. patent was granted 3 years earlier. With it, IRRI has 3 patents granted on this invention. The other patent applications in the same family have been discontinued<sup>13</sup>.

8. Intellectual property rights means ownership rights (or applications for protection) of intellectual assets, whether registered or not, granted in any jurisdiction, including, but not limited to, copyright and related rights, database rights, patents, industrial design rights, plant variety rights, trademarks and service marks, geographical indications, and trade secrets (Section 5.1. of the CGIAR IA Principles).

9. Section 5.1. of the CGIAR IA Principles.

10. Section 5.2. of the CGIAR IA Principles.

11. Sections 6.1. and 6.2. of the CGIAR IA Principles.

12. Section 6.3. of the CGIAR IA Principles.

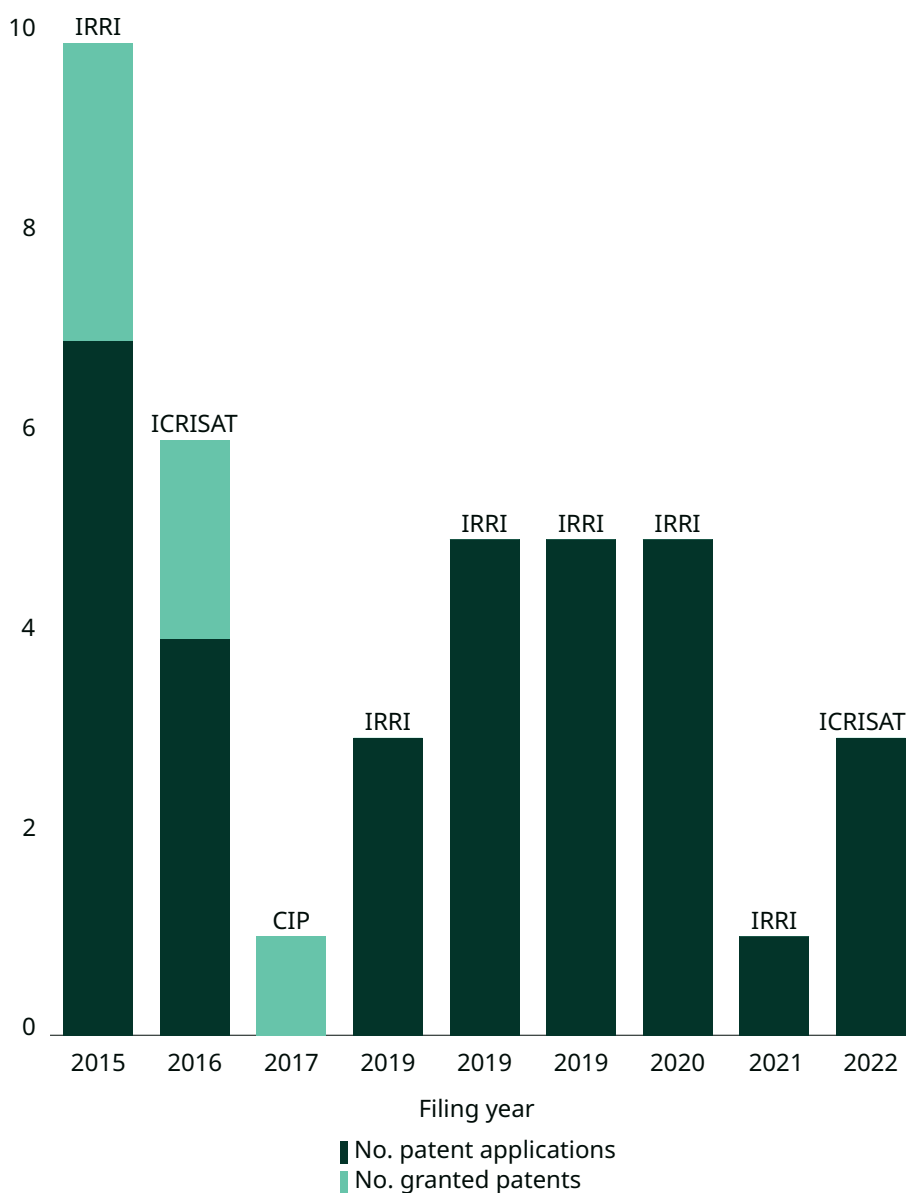
13. The three IRRI granted patents are entitled Increasing Hybrid Seed Production Through Higher Outcrossing Rate in Cytoplasmic Male Sterile Rice and Related Materials and Methods. The granted Indian patent [IN 201727044863](#), the Philippine patent [PH1/2017/502183](#) and the U.S. patent [US 10,999,986 B2](#) are part of a family of related patent applications filed in Australia, Brazil, China, Indonesia, Vietnam, as well as a European Patent application and one under the Patent Cooperation Treaty. All of these related patent applications have been discontinued.

IRRI is further developing the high outcrossing rates methodology under a separate family of patent applications<sup>14</sup>. IRRI plans to offer non-exclusive, royalty-free licenses to NARES partners for research, breeding and non-commercial use of this technology. Private sector partners will be offered non-exclusive commercial licenses, tied to impact assessment and benefit sharing obligations of the SMTA. More information on this invention and the patents granted can be found [here](#).

The justifications for the 2024 granted patents, which apply to the entire patent family, were accepted by the SC IP Group and the CGIAR System Organization and deemed consistent with the CGIAR IA Principles' emphasis on maximizing global accessibility and impact.

Overall, since 2012, CGIAR Centers have used patents sparingly. No new filings or national conversions were made in 2024, continuing the low patenting trend of recent years. Between 2015 and 2024, only nine distinct inventions have been subject to patent filings, with IRRI holding the largest patent portfolio<sup>15</sup> (see Figure 1). Up to 2024, six patents have been granted: three by IRRI, featured in this report; two by ICRISAT on pigeon pea<sup>16</sup>; and one by CIP on a batata-based micronutrient formulation<sup>17</sup>.

**Figure 1. Patents reported by CGIAR Centers.**



Each bar represents one patent family (i.e., one invention), with a total of nine inventions reported by CIP, ICRISAT, and IRRI. Light green indicates granted patents, while dark green shows filed patent applications. Three of the nine inventions have granted patents currently in force through 2024. IRRI's patents, filed in 2015, were granted in 2021 and 2024 (see footnote 13). ICRISAT's 2016 filings were granted in 2021 (see footnote 16), and CIP's 2017 filing was granted in 2023 (see footnote 17). As of 2024, no patents filed since 2019 have been granted.

Low patenting rates by CGIAR Centers may reflect concerns about aligning exclusive rights with CGIAR's global access mission, uncertainty about what to patent and how to manage it, and high transaction and maintenance costs, not be budgeted for and that compete with other priorities like publishing, dissemination, or using other approaches to place research products in the hands of their target beneficiaries.

14. The patent applications of this family are entitled Methods of Increasing Outcrossing Rates in Gramineae. The Patent Cooperation Treaty application [WO 2022/038536](#) has related applications filed in India, the Philippines, the U.S. and a European Patent application.

15. IRRI's patent families from 2015 to 2023 cover 4 different inventions. One of the inventions is featured in this report. In 2019, IRRI reported 13 patent applications covering an invention related to genes to detect bacterial resistance in rice and another invention on genes for enhancing rice grain yield, filed in countries such as India, the Philippines, and the U.S., and in Europe and with the African Regional Intellectual Property Organization (ARIPO). In 2020, IRRI reported 5 patent applications in some of the mentioned countries for a gene controlling stigma length in rice, which enhances outcrossing.

16. ICRISAT's patents on a cytoplasmic male sterile gene in pigeon pea granted in 2021 are [US 11060106 B2](#) in the U.S. and [EP 3548505 B1](#) in Europe.

17. CIP's patent granted in Peru on January 17, 2023 corresponds to Certificate No. 11636. The granted patent is in Spanish. Bibliographic information in English on the original patent application can be found [here](#).



A meal prepared with biofortified beans in Chiquimula, Guatemala  
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## Industrial design

Industrial designs **protect the aesthetics aspects of a novel and original product**<sup>18</sup> such as shape, configuration, and appearance, rather than its function. To protect functionality, patents or utility models are required. Registered industrial designs give owners the right to prevent others from making, selling, importing the same or similar designs for commercial purposes. These rights are typically valid for 10 years, with renewals possible in some jurisdictions. Industrial designs can **help distinguish products in the market** and open up licensing opportunities.

Although not explicitly mentioned in the CGIAR IA Principles, industrial designs must be managed in line with CGIAR's commitment to integrity, equity, accountability and impact."<sup>19</sup> CGIAR Centers applying for or authorizing the use of such rights must demonstrate how they support the improvement or broader impact of the underlying intellectual asset, consistent with CGIAR's mission.

ICRISAT registered an industrial design, and it is the first CGIAR Center to be granted such IP right. The registered design is a solar-powered water hyacinth harvester (Figure 2)<sup>20</sup>. The harvester addresses challenges related to energy supply, labor and time consumption, harvesting efficiency, and operation skills. The industrial design aims to protect unauthorized copies of the harvester and facilitate the licensing of the design (see Box 2 for more information).

The SC IP Group and the CGIAR System Organization considered the arguments for registering the industrial design to be in line with the CGIAR IA Principles of maximizing global accessibility and impact.

**Figure 2. Bottom view of the solar-powered water hyacinth harvester**



18. A product is protectable as an industrial design if it is novel—that is, not previously disclosed to the public—and if it is original—that is, significantly different from known designs or combinations of known design features.

19. Article 5 of the CGIAR IA Principles.

20. The certification for registration of the industrial design [No. 430452-001](#) was granted in India on 4 November 2024.



### **Box 2: Industrial design example: Solar-powered water hyacinth harvester protected as industrial design in India**

In November 2024, ICRISAT received its first-ever industrial design registration from the Indian Intellectual Property Office for a solar-powered water hyacinth harvester—also marking a first for any CGIAR Center to get intellectual property registration on a design.

Developed to address the persistent challenge of water hyacinth infestations in rural water bodies, the harvester offers a sustainable alternative to chemical and biological control methods, which are often costly, hazardous, and short-lived. The machine is designed to be simple, affordable, and operable by rural communities, including semi-skilled or unskilled workers. It reduces labor and time significantly—removing in 2–3 days what would take 10–20 laborers nearly three weeks to harvest manually from a 1.2-hectare pond.

Powered by solar energy, the harvester is both cost-effective—at roughly one-tenth the price of comparable commercial models—and environmentally friendly. It was developed with support from the Department of Agriculture and Farmers' Empowerment, Government of Odisha, India, as part of a broader strategy to promote sustainable water management and rural innovation.

Beyond environmental benefits, the initiative aims to foster women-led enterprises. Women's self-help groups are envisioned to repurpose the harvested biomass into compost, fish feed, or handmade paper—creating new livelihood opportunities and enhancing local fisheries.

The industrial design protection, which lasts for 10 years from the date of registration, covers the harvester's aesthetic and ornamental features, helping prevent unauthorized replication of the design, and supporting ICRISAT's licensing and deployment strategy. One license has been issued during the first quarter of 2025, with additional partnerships under exploration.

For more information, visit [here](#).

Members of the Saubhagini women Self-Help Group (SHG) utilizing harvested water hyacinth biomass for aerobic composting in Chandanpur village of Puri, Odisha, India.

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## Trademarks

Trademarks protect the **brand identity of a product or service** – not the product itself.<sup>21</sup> They help identify the source of the product or service and the features that distinguish it from similar others, including a product's or service's quality and consistency.<sup>22</sup>

CGIAR Centers have used trademarks since the 1990s, primarily for institutional names and logos to safeguard their identity and reputation. They also registered trademarks for research-derived products to prevent counterfeiting and help ensure quality in the target market. Trademarks can be licensed alongside products or services, with licensees compelled to meet specific standards to maintain the product's quality and identity. CGIAR Centers as licensors may revoke use of the trademark and the associated product or service or take corrective action if license terms are not met, protecting both the product's or service's integrity and the Center's reputation.

The Alliance of Bioversity and CIAT, CIMMYT, IITA, and IIRI reported 4 registered trademarks for 2024, totaling 9 records across 8 countries (Table 1).

One trademark, reported by the Alliance, represents the institutional brand of FLAR—Fondo Latinoamericano para Arroz de Riego—a rice program based in Cali, Colombia. [FLAR](#) unites over 30 public and private organizations from 17 Latin American countries to promote knowledge and innovative technologies to enhance the sustainability and competitiveness of rice production in the region. As of 2024, FLAR has released nearly 100 rice varieties in 15 countries. The FLAR® logo identifies the Fund's knowledge products and technologies and is registered in Ecuador, Honduras, Mexico, and Paraguay.

CIMMYT's AAA Maize® trademark is linked to the Affordable, Accessible Asian Drought-tolerant Maize Project, launched in 2010 with Syngenta Inc., and support from the Syngenta Foundation for Sustainable Agriculture. The [AAA Maize project](#) develops drought tolerant maize for regions in Asia with unreliable rainfall, in collaboration with NARES from six countries. Initially registered in India by the Syngenta Foundation, the trademark was officially assigned to CIMMYT in 2024. AAA Maize® identifies AAA Maize products released and commercialized by national partners in India to support smallholder farmers.

[Aflasafe®](#) is IITA's trademarked biofungicide developed to control aflatoxin - a killer fungal toxin - in cereals. IITA licenses the production and marketing of the biocontrol

product to private and public entities across Africa. It uses the trademark to ensure product recognition and quality, as the biofungicide is manufactured according to IITA's standards. In 2023-2024, Aflasafe® was registered in Malawi, Uganda and Zambia, bringing the total to at least 24 African countries.

AutoMonPH is IIRI's trademark for an irrigation advisory system also covered by a pending utility model disclosed in the [2023 CGIAR Intellectual Assets report](#). IIRI aims to use both intellectual property protections to attract manufacturers or investors to further develop and commercialize the irrigation tool. AutoMonPH® will help differentiate IIRI's improved irrigation system from other irrigation devices. Find more information [here](#).

21. A registered trademark gives the owner the right to use, license, or sell the trademark.

22. Trademarks are signs that can take many forms, including names, logos, letters, symbols, drawings, slogans, packaging, and distinguishing features such as color, shape, fragrance or odor, and sounds. A trademark term is usually 10 years, renewable for an equal term upon payment. Applicants must select the group of goods or services (the "class") associated with the trademark. The international classification system (the Nice Classification) contains 45 classes, 34 for goods and 11 for services. A trademark can be registered for several classes depending on the groupings of the associated products or services. In general, the owner should file a notification of use of the trademark with the pertinent authority to maintain a trademark in force.

Table 1. CGIAR Centers registered trademarks reported for 2024.

Center	Trademark and type	Associated product/ service and classes	Country <sup>23</sup>
 <p>Alliance Bioversity and CIAT</p>	 <p>FLAR®</p>	<ul style="list-style-type: none"> <li>• Institutional name of Latin American &amp; Caribbean rice fund</li> <li>• Class 42: agricultural research in rice; organization and development of technical studies on rice</li> </ul>	<ul style="list-style-type: none"> <li>• Ecuador</li> <li>• Honduras</li> <li>• Mexico</li> <li>• Paraguay</li> </ul>
 <p>CIMMYT</p>	 <p>AAA Maize®</p>	<ul style="list-style-type: none"> <li>• Maize product</li> <li>• Class 31: seeds</li> </ul>	<ul style="list-style-type: none"> <li>• India</li> </ul>
 <p>IITA</p>	 <p>Aflasafe®</p>	<ul style="list-style-type: none"> <li>• Biocontrol product</li> <li>• Class 5: fungicides</li> </ul>	<ul style="list-style-type: none"> <li>• Malawi</li> <li>• Uganda</li> <li>• Zambia</li> </ul>
 <p>IRRI</p>	 <p>AutoMonPH®</p>	<ul style="list-style-type: none"> <li>• Irrigation advisory system for rice</li> <li>• Class 9: data processing /measuring apparatus</li> <li>• Class 44: agricultural services</li> </ul>	<ul style="list-style-type: none"> <li>• Philippines</li> </ul>



23. Most records of the registered trademarks shown are accessible directly through the national IP offices. However, some records can be accessed at the [Global Brand Database](#) administered by the World Intellectual Property Organization. These records correspond to: FLAR® in Mexico (Registration No. 2530940), AAA Maize® in India (Registration No. 4367075), Aflasafe® in Zambia (Registration No. 2023/001015), and AutoMonPH® in the Philippines (Registration No. 4/2023/00523857).

## Intellectual property rights dashboard

An interactive dashboard with information on the submitted applications and granted or registered patents, plant breeders' rights, and trademarks reported by CGIAR Centers since 2019 is available [here](#).

## Limited exclusivity agreements

Section 6.2 of the CGIAR IA Principles allows CGIAR Centers to grant limited exclusivity in agreements for the commercialization of intellectual assets, provided research and emergency use exemptions are maintained. Exclusivity must be minimal in duration, geography, and scope, and justified as necessary to improve the asset or broaden its impact in line with the CGIAR Vision, including details on the actual or foreseen dissemination strategy, global access, and expected impact. Any deviation from the exemptions requires prior approval and strong justification.

These agreements commonly involve improved plant varieties - such as inbred lines or hybrids- developed by Centers' breeding programs, using germplasm from the MLS of the International Plant Treaty (e.g., from a CGIAR Center's genebank or from elsewhere transferred or acquired under an SMTA). Centers design licensing arrangements that comply with benefit-sharing obligations under the MLS and ensure that the plant materials remain available for research and breeding by third parties.

CGIAR Centers justify limited exclusivity similarly to patent or plant variety protection cases, arguing it provides incentives for partners to invest in advancing the crop materials or technologies and commercializing them for broader use by farmers.

Centers reported 41 limited exclusivity agreements entered in 2024: 40 by CIMMYT and 1 by IIRI. CIMMYT's agreements cover the licensing for release and commercialization of 35 unique maize hybrids to 6 public and 31 private entities across 31 African, 5 Asian, and 1 Latin American country. These five-year, renewable licenses include safeguards: the hybrids remain available for non-commercial public research and must be accessible during national or regional food emergencies. Licensees are prohibited from seeking IP rights over

the materials, and continued research and breeding use is ensured. Although these licenses likely do not trigger mandatory payments under the International Plant Treaty's Benefit-Sharing Fund, CIMMYT encourages voluntary contributions<sup>24</sup>. A [public disclosure](#) and [interactive dashboard](#) of CIMMYT's licensing can be accessed online.

IIRI reported amending a 2019 license with a private partner for the commercialization of three elite rice hybrids in the Philippines<sup>25</sup>. The amendment replaced one hybrid with another, maintaining all other terms.

24. Further information concerning the maize materials available for licensing is available [here](#). Likewise, detailed information on the guidelines, principles, and procedures followed by CIMMYT for the allocation of products can be found [here](#).

25. The original license concerned the rice hybrids Mestizo 71, 77, and 89. In the amended license, one of the hybrids was replaced by another one.



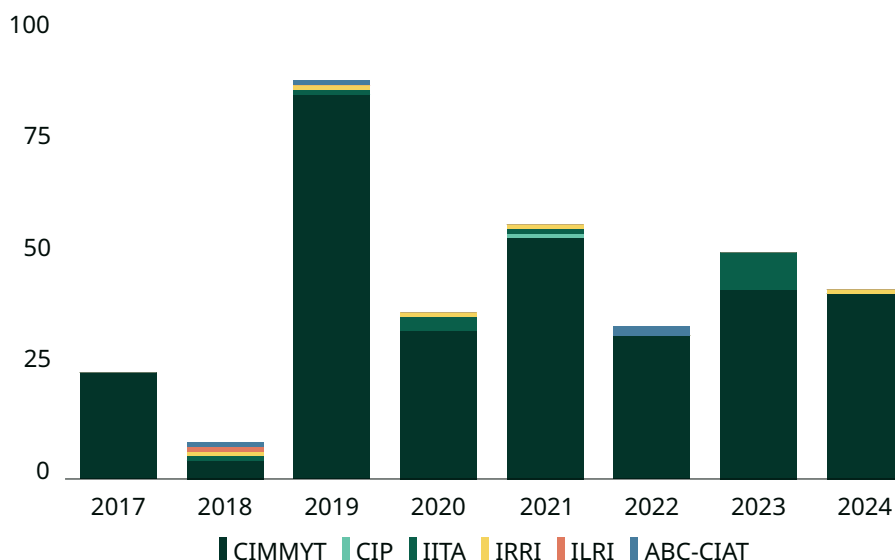
Experimental harvest of provitamin A-enriched orange maize, Zambia  
©2011 CIMMYT CC BY-NC-SA 2.0

A public disclosure covering the original agreement and its amendment is available [here](#).

The SC IP Group and the CGIAR System Organization accepted the justifications for all 41 agreements as consistent with the CGIAR IA Principles' criteria on global accessibility and impact.

Since 2017, CIMMYT's licenses account for the majority of the reported limited exclusivity agreements. CGIAR Centers have reported 311 limited exclusivity agreements, 284 by CIMMYT, primarily for maize hybrids (98%) and some for wheat (2%). IITA follows from a distance with 14 agreements reported, mostly related to Aflasafe production (64%) and the remainder (36%) to soybean. On a minor scale IRRI, has reported three licenses for hybrid rice commercialization (one amended twice), while CIAT (before becoming part of the Alliance), CIP, and the Alliance of Bioversity and CIAT each reported two limited exclusive licenses covering seed production and commercialization of improved cassava, Brachiara (a forage grass), potato, rice, and beans (see Figure 3).

**Figure 3. Number of limited exclusive licenses reported by CGIAR Centers per year since 2017.**



ABC refers to the Alliance of Bioversity and CIAT. The Alliance first reported two limited exclusivity agreements in 2022; prior to that, such agreements were reported under CIAT.

<b>2017</b>	Maize hybrids
<b>2018</b>	Brachiaria hybrids, biofungicide, maize hybrids, wheat varieties, Mycoplasma vaccine, rice hybrids
<b>2019</b>	Cassava, biofungicide, legumes, maize hybrids, rice hybrids
<b>2020</b>	Biofungicide, maize hybrids, rice hybrids
<b>2021</b>	Biofungicide, maize hybrids, potato varieties, rice hybrids
<b>2022</b>	Maize hybrids, wheat varieties, rice, beans
<b>2023</b>	Biofungicide, soybean varieties, maize hybrids
<b>2024</b>	Maize hybrids, rice hybrids

## Restricted use agreements

Restricted use agreements, as outlined in Section 6.3 of the CGIAR IA Principles, allow CGIAR Centers to use third-party intellectual assets under conditions that may restrict global access to products for commercialization, research, or development. These agreements are permitted only when no less restrictive alternatives are available, and the resulting products support the CGIAR mission in target countries. Centers must also ensure the third-party assets are used solely for the intended purpose and must provide dissemination strategies addressing global access, impact, and communication.

Such agreements enable access to advanced technologies that might otherwise be unavailable due to proprietary restrictions or limited internal capacity. Centers' dissemination plans usually reflect the provider's conditions, such as geographic limits and end-user obligations like stewardship or regulatory approvals.

Most restricted use agreements at CGIAR involve integrating third-party technologies into improved crop varieties developed through breeding programs that use germplasm from the International Plant Treaty's MLS. These varieties are transferred under the SMTA with added conditions.

Further, commercialization of these varieties must comply with SMTA rules—ensuring licensees honor benefit-sharing obligations or allow research and breeding access. However, availability may still be limited by provider-imposed or national regulatory restrictions, such as those related to genetically modified organisms or genome editing. CGIAR Centers aim to balance accessibility with these constraints.

IITA reported one restricted use agreement for 2024, related to the licensing of the Fulcrum™ Platform developed by Pairwise Plant Services Inc., which uses CRISPR<sup>26</sup>-based genome editing technology with additional tools developed in-house. IITA will use the Fulcrum™ Platform for the improvement of several crops to biological and climate-related stresses in Africa (see Box 3 for more information).

The SC IP Group and the System Organization accepted IITA's justifications on the reported restricted use agreement as consistent with the CGIAR IA Principles of maximizing global accessibility and impact.

### **Box 3: Restrictive use agreement example: IITA licenses Pairwise's gene-editing technology for crop improvement**

IITA has secured a non-exclusive license from Pairwise Plants Services Inc. to access and use its Fulcrum™ technology to carry out genome editing in several crops such as yam, taro, banana and enset for the benefit of smallholder farmers in some countries of East and West Africa.

The non-exclusive license of the mentioned technology covers research, development and dissemination of gene-edited crops varieties that respond and thrive under climate-related stresses. The Fulcrum™ Platform is based on CRISPR as a gene-editing tool that is combined with REDRAW™, a proprietary RNA-encoded tool that can make small DNA allele replacements at CRISPR targeted sites. The REDRAW™'s work is enhanced by SHARC™, a proprietary enzyme that works well for cutting, base editing, and REDRAW™ editing. Pairwise Fulcrum™ Platform claims to accelerate the development of improved varieties through more targeted editing.

IITA selected to license Pairwise technology due to its applicability, specificity and efficiency for the intended accelerated development of improved varieties. In addition, the technology has a record of regulatory compliance, which is important for IITA when the time comes to evaluate and disseminate specific products, including seed and grain in the specific geographies.

IITA plans to reach smallholder farmers with the crops products that it will develop through partnerships with NARES in the specified African territories.

More information can be found [here](#).

## Developments under previously reported restrictive arrangements

While this report primarily assesses CGIAR Centers' compliance with the CGIAR IA Principles, strategic intellectual asset management is increasingly seen as vital to achieving CGIAR's research and innovation goals.

Since 2022, Centers have voluntarily shared brief updates on outcomes from previously reported limited exclusivity and restricted use agreements, as well as from patents and plant breeders' rights. These early results suggest such arrangements can contribute to CGIAR's impact strategies. Formalizing this type of reporting—based on defined criteria—is under consideration as part of rethinking the role of intellectual asset management in the 2025–2030 CGIAR research and innovation portfolio.


Since 2022, CIMMYT, CIP, IITA, and IRRI have reported selected results mostly from implemented limited exclusive licenses, some dating back to 2016. While impact remains a long-term goal, these results suggest that such arrangements have supported the production and dissemination of CGIAR research-based products. The latest developments since the last reporting cycle are shown in Table 2.

26. CRISPR stands for "clustered regularly interspaced short palindromic repeats". It is a technology used by scientists since 2012 to modify the genome of target organisms in a very precise manner. It was first detected in bacteria, which use it as a defense mechanism against viral infections. The bacteria transcribe the repetitive DNA sequences (the "CRISPR") into RNA when it get infected by virus. The RNA guides a nuclease – a DNA-cutter enzyme - to the viral DNA to cut it and in this way, provides protection against the virus. Source: [The Jackson Laboratory. What is CRISPR?](#)

**Table 2. Latest developments under CGIAR Centers’ previously reported restrictive arrangements.**

Center	Restrictive arrangement (type-subject matter-first reporting year)	2024 developments
<b>CIMMYT</b> 	Limited exclusivity licenses for the production and dissemination of elite CIMMYT-derived maize hybrids and open-pollinated varieties -2017	Since 2017, CIMMYT has licensed over 200 maize products under five-year, territorially limited agreements to more than 70 public, private, and parastatal entities across three continents.  <b>In 2024:</b> <ul style="list-style-type: none"> <li>• CIMMYT allocated 35 maize materials to 37 licensees in 31 African, 1 Latin American and 5 Asian countries.</li> </ul> Further details and statistics are available <a href="#">here</a> .
	Refined licensing framework for the commercialization of SPTA maize hybrids by African national entities - 2022	In 2022, CIMMYT reported a restricted use agreement under the Seed Production Technology for Africa (SPTA) project, enabling access to Corteva’s genome editing technology for creating male-sterile maize via a transgenic maintainer line, where the final parental and hybrid seeds are transgene-free. Qualibasic Seed Company Ltd. (QBS), as Corteva’s licensee, produces early generation seed for the commercialization of CIMMYT-bred SPTA maize hybrids suitable for tropical conditions in Sub-Saharan Africa.  <b>In 2024:</b> <ul style="list-style-type: none"> <li>• CIMMYT, QBS and the African Agricultural Technology Foundation (AATF) co-developed a sublicense template now used by QBS and AATF to authorize Sub-Saharan NAREs and local seed companies to produce and distribute SPTA maize in countries where it is classified as non-transgenic.</li> </ul> More information on the project, licensing and the release plans is available <a href="#">here</a> .
	Non-exclusive sublicenses for the commercialization of TELA® maize hybrids <sup>27</sup> in Nigeria - 2019	In 2019, CIMMYT, Monsanto (now Bayer CropScience), and AATF entered a restricted use agreement for the commercialization of TELA® maize—drought-tolerant and insect-resistant varieties developed by CIMMYT using Monsanto technology. AATF manages regulatory approvals and sublicenses the varieties to national partners in countries where approval has been granted.  <b>In 2024:</b> <ul style="list-style-type: none"> <li>• Nigeria approved four TELA® maize varieties for commercial release, and</li> <li>• AATF signed non-exclusive sublicenses with six Nigerian small-to-medium seed companies for their production and commercialization</li> </ul> More information on the project <a href="#">here</a> and Nigeria’s approvals can be found <a href="#">here</a> .

27. TELA, derived from the Latin word “tutela”, meaning protection, is the name of the TELA Maize project, aimed at commercializing transgenic drought-tolerant and insect-protected (fall armyworm and stemborers) maize varieties to enhance food security in Sub-Saharan Africa.

Center	Restrictive arrangement (type-subject matter-first reporting year)	2024 developments
 <p><b>CIP</b> INTERNATIONAL POTATO CENTER A CGIAR RESEARCH CENTER</p>	<p>Limited exclusivity agreement – development and dissemination of five tropically adapted potato varieties for Asia (TAP-5) -2016</p>	<p>In 2015, CIP and HZPC Holding B.V. (Netherlands) launched the TAP-5 collaboration to develop five potato hybrids suited for Asia, using parent lines from both partners. HZPC is responsible for commercialization through sublicensees and may seek plant variety protection as needed.</p> <p><b>In 2024:</b></p> <ul style="list-style-type: none"> <li>• Collaboration expanded to Kenya, where late blight-resistant hybrids were <u>tested</u>.<sup>28</sup> Further expansion to other African countries is under consideration.</li> </ul>
 <p><b>IITA</b> Transforming African Agriculture</p>	<p>Limited exclusivity 5-year license to BAAMTARE for the production and sale of Alfasafe in Senegal and Gambia - 2017</p>	<p>Manufacture and sales in 2024:</p> <ul style="list-style-type: none"> <li>• The company produced and sold 200 MT of Aflasafe SN01 in Senegal and Gambia.</li> <li>• Under a non-exclusive license, BAAMTARE produced and sold approximately 223 MT in Mali and 85 MT in Burkina Faso, where demand continues to rise.</li> </ul>
	<p>Limited exclusivity 5-year license to Harvestfield Industries Ltd. for the production and sale of Alfasafe in Nigeria - 2018</p>	<p>Manufacture and sales of Aflasafe GH02 in 2024:</p> <ul style="list-style-type: none"> <li>• The company sold 118 MT in Ghana; and</li> <li>• 127 MT were produced for Nigeria and Niger, with efficacy trials ongoing in Niger.</li> </ul> <p>IITA is currently assessing the reasons for a decline in production and sales in Nigeria.</p>
	<p>Limited exclusivity 5-year license to A to Z Textile Mills Ltd. for the production and sale of Alfasafe in Tanzania -2018</p>	<p>While in 2023, A to Z produced 21.8 MT of Aflasafe TZ01 for Tanzania, and 700 kg of Aflasafe RW01 for efficacy trials in Rwanda, there were no manufacturing activities in 2024. The license expired and negotiations are ongoing.</p>
	<p>Limited exclusivity 5-year license to KALRO (Kenyan NARS) for the production and sale of Alfasafe in Kenya -2018</p>	<p>Manufacture and sales in 2024:</p> <ul style="list-style-type: none"> <li>• KALRO produced 8 MT of UG01 for Uganda, 2 MT of SD01 for Sudan, and sold 53 MT of KE01 from 2023 carryover stock in Kenya through Koppert Kenya Ltd. KALRO's manufacturing license for KE01 was renewed for five years.</li> </ul>
<p>All IITA's licensees conducted outreach to promote Aflasafe as a solution to aflatoxin, raised awareness about aflatoxin's risks and management, and supported farmers (e.g., groundnut growers) in producing aflatoxin-safe crops.</p>		

28. Late blight is a fungal infection caused by the water mold *Phytophthora infestans*.

Center	Restrictive arrangement (type-subject matter-first reporting year)	2024 developments
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IRRI



Limited exclusivity 6-year license to SL AgriTech Corporation for the production and distribution of two hybrid rice varieties (Mestizo 61 & Mestizo 68) in the Philippines -2018

The two elite hybrids are from the Hybrid Rice Development Consortium (HRDC).

- From a net sales volume of 15,819 kg in 2020, it increased to 309,726 kg in 2023 and dropped to 246,045 kg in 2024.
- Royalties to be paid in 2024: USD 209.945 (still pending)

Limited exclusivity license to Tao Commodity Trader, Inc. for the commercialization of three HRDC rice hybrids (Mestizo 71, Mestizo 77, and Mestizo 89) in the Philippines -2019

- Net sales volume was around 4,000 kg in 2023 and dropped to 120 kg for Mestizo 89 in 2024
- Low seed sales in 2024 due to contamination of seed lot, leading to a product recall from the market.
- Royalties to be paid in 2024: USD 37.34

The two IRRI's limited exclusivity licenses include clauses on revenue sharing by the licensees with the International Benefit Sharing Fund of the International Plant Treaty.

Non-exclusive research licenses for the evaluation of IRRI's High Outcross rice lines – the lines contained technology claimed in patent applications

In 2024, IRRI granted three-year, non-exclusive research licenses for evaluation, proof-of-concept trials, and further breeding of high outcrossing rice lines to:

- Seed Works International Private Ltd. in India
- PT Bisi International Tbk. in Indonesia
- Advanta Enterprises Ltd. in India

These licensed lines were developed using methods and traits claimed in the patent application [WO 2022/038536](#) (see Patents section and footnote 19 for details). More information on the patent family and the invention purpose is available [here](#).



Hybrid rice at IRRI  
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# Intellectual assets-related management across CGIAR

## Research portfolio reporting and intellectual property linkages

Assessing the contribution of the strategic management of intellectual assets to CGIAR research and innovation goals has been a recommendation by the SC IP Group for the past two years. Currently, the main CGIAR technical reporting tool captures information about expectations on private sector engagement, interest in seeking IP rights protection for innovations, and the need for expert support in the IP area. This information establishes a link between the technical and IP efforts to steer innovation management. The 2025-2030 Technical Reporting Arrangements<sup>29</sup> designed in 2024 include intellectual assets and related IP rights reporting aligned with [2025-2030 CGIAR Research and Innovation Portfolio](#) results. In 2025, efforts will focus on enhancing reporting tools to ensure synchronized tracking of both technical and intellectual property-related achievements. The IP rights dashboard complementing the current report will be integrated with the new tools to support comprehensive reporting from 2025 onward.<sup>30</sup>

## CGIAR engagement in intellectual assets management

In 2024, various CGIAR groups focused on operational aspects of intellectual assets management, such as ownership, due diligence, and implications of research-based services contracts. Others work on scaling innovations and translating research outputs into market-ready solutions with broader impact.

### Operational guidance and capacity sharing by the CGIAR Intellectual Property Community of Practice

The CGIAR IP Community of Practice developed a CGIAR-wide guidance document on ownership models for research-based assets, particularly when multiple Centers collaborate under CGIAR Programs or Accelerators. Clear ownership—sole or joint—is essential to define access and use rights and facilitate downstream development, funding, and dissemination.

Recognizing the importance of partnerships, the IP Community of Practice also shared best practices for conducting institutional due diligence to assess potential partners' risks. A CGIAR-wide webinar featured Center IP practitioners discussing due diligence processes and risk mitigation strategies.

With research-based service contracts becoming more common, the IP Community of Practice also hosted webinars for finance and legal staff to examine the risks and challenges they pose—such as liability, taxation, costing, and IP rights—compared to traditional grant agreements.

In 2024, members of the IP Community of Practice shared expertise on IP and regulatory frameworks with Global South partners to strengthen understanding and support the use of agricultural biodiversity for innovation and sustainable growth.

Under the Indian Technical and Economic Cooperation Program, ICRISAT organized two fully funded, in-person, two-week training programs at its Hyderabad campus. The first, held in early 2024, trained 27 participants from 11 African countries on IP systems, technology transfer, market research, and innovation strategies tailored to local needs. The second, in March, brought together 29 participants from 16 countries across Asia, Latin America, and Africa to explore global IP laws and policy implementation challenges, helping them develop national IP strategies.

In Latin America and the Caribbean, the Alliance of Bioversity and CIAT, CIMMYT, and CIP jointly trained national genebank professionals on legal frameworks for access and benefit sharing of plant genetic resources and genomic data. During the 7th Community of Practice workshop for Latin American and Caribbean genebanks, 27 participants from 12 countries reviewed how international, regional, and national policies affect their ability to conserve, exchange, and use crop resources for regional agricultural development.

### Scaling CGIAR innovations

To support delivery of innovations from Initiatives, Impact Area Platforms and Science Group Projects, CGIAR applied a [scaling readiness approach](#). Between 2022 and 2024, in-person workshops and an online course guided researchers and partners in aligning innovation development with user needs. These

29. The CGIAR 2025-2030 Technical Reporting Arrangement aligns pooled and bilateral funding reporting to track outputs, outcomes and impacts across the CGIAR Research and Innovation Portfolio 2025-2030. It aims to support strategic decision-making and resource mobilization.

30. Annex 1 of this annual report discusses the responses to the recommendations made by the SC IP Group for the 2023 intellectual assets report. The introduction of dashboards as reporting tools was one of such recommendations.

efforts led to the launch of the [Scaling for Impact Program](#) in 2024. The Program supports innovation by:

- Identifying promising research outputs
- Designing tailored innovation bundles and scaling pathways
- Strengthening policy and market environments for inclusive uptake

Connections between this program and the IP Community of Practice are being explored to integrate IP considerations into scaling strategies.

## Accelerate for Impact Platform (A4IP) and Research and Market Pathways (RAMP)

Hosted by the Alliance of Bioversity International and CIAT, A4IP links CGIAR research and external innovations to market opportunities. In 2024, A4IP became a component of the Scaling for Impact Program and ran three innovation challenge projects [AgriTech4Egypt](#), [AgriTech4Kenya](#) and [CircularEconomy4Colombia](#), supporting agri-tech-based startups with business training, technical advice, mentorship, and funding to accelerate their growth in those country market environments.

In November 2024, A4IP launched [RAMP](#), a three-stage accelerator program (Discovery, Launch and Accelerate) to equip CGIAR scientists with the skills and tools to turn research into impactful, market-ready solutions. The Discovery phase introduced scaling pathways and models and helped participants identify their target audiences. The Launch and Accelerate stages in 2025 will focus on validating innovations and creating suitable market models.

The CGIAR IP community plans to build connections with A4IP and RAMP to provide intellectual property management support aligned with scaling objectives.



Use of drones to monitor rice crop at CIAT's headquarters in Colombia.  
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# System Council IP Group Independent Report

The SC IP Group, upon completion of the annual review of the Centers' intellectual assets management reports for 2024, and a productive exchange of information with several CGIAR groups in Montpellier (28-30 April 2025), wishes to present to the System Council key points of interest identified.

## Compliance with the CGIAR IA Principles

Based on the review of the submitted CGIAR Center Reports, Centers overall are highly compliant with the CGIAR IA Principles. Most of the clarification and improvement required by the reviewers involved developments under previously reported restrictive arrangements, some public disclosures, and the reasoning for the application and grant of newly reported forms of IP rights protection.

## Evolving context of intellectual assets management

Since the adoption of the CGIAR IA Principles, we have been observing the evolving role of intellectual assets in the delivery of CGIAR's mission. The trend is becoming more visible to global stakeholders through the annual SC IP Group reviews, and this year's reports provide interesting examples.

**At the research level**, the application of proprietary technologies such as genome editing is promising and justifies carefully structured restricted use agreements under which CGIAR researchers and their partners access these technologies. Agreements need to strike a balance between the necessary protection of

the technology owner's proprietary interest, and the freedom of CGIAR researchers and partners to deploy these technologies and disseminate their resulting products by using broad and diverse paths to markets. An example reported this year involves the U.S. company, Pairwise, which has granted licenses to use its genome editing technologies. These licenses need to be explicit about their scope, fields of use, and territories: if licensed products of the technology include grains (or tubers as the case may be) produced by smallholders, and if these products can be exported beyond the geographic area of technology use. Notably, the reported agreement successfully built in the necessary rights for a viable pathway to impact for smallholder farmers.

**On paths to impact**, delivering and disseminating the products of innovation is also evolving in a variety of promising ways:

- The private sector, including developing seed industries, is playing an increasing role in disseminating varieties obtained by CGIAR researchers and their partners.
- The NARES of partner countries are becoming more engaged and taking more responsibility in obtaining and delivering improved varieties.
- Products obtained using new technologies (for example genome editing or genetic modification) are increasingly approaching the markets. Their responsible dissemination now requires new levels of stewardship (specifying how the technology ought to be used by smallholders for maximum effectiveness and minimum risk of unwanted outcomes) and compliance with regulations.

## Further intellectual assets management learning opportunities identified

As reported in previous years, we see further opportunities for using intellectual assets management to:

- Learn about and evaluate the different impact pathways. For example, CGIAR stakeholders and strategic managers might compare licensing programs and share learnings from Centers and their partners on strategies for licensing hybrid improved varieties (maize, rice, sorghum and pearl millet now, possibly wheat tomorrow).
- Monitor the performance of the various innovations and their diverse paths to impact. Licensing agreements, such as limited exclusivity agreements, for example, can require licensees to provide information on the real-world outcomes at scale.

We see a promising opportunity for the new **Scaling for Impact** Program to take full advantage of reviewing these various approaches and agreements to determine and evaluate the various dissemination models already underway and expand from there to achieve even greater impact. By emphasizing impact as its purpose, this Program appears to have significant promise as a means of advancing the CGIAR portfolio through a proactive strategy of intellectual assets management.

We also noted another initiative which contemplates the commercialization of intellectual assets known as, **RAMP**. This initiative appears to be structured to select promising CGIAR innovations for the purpose of meeting agrifood industry demands. It was, however, unclear to the SC IP Group whether or precisely how RAMP may be connected to the Scaling for Impact Program.

We were encouraged by the progress made in 2024 by CGIAR regarding the issue of benefit sharing arising from the use of DSI. The tangible results of CGIAR work such as participation in international multistakeholder discussions, webinars, and general articles, are readily accessible by the public on a [dedicated website](#) run by the CGIAR Genebanks Accelerator. CGIAR, through the Genetic Resources Policy Group, remain actively engaged in the ongoing discussions regarding the implementation of the multilateral mechanism for DSI benefit sharing of the CBD and the further enhancement of the MLS of the International Plant Treaty and what this could mean for CGIAR.

## **Emerging complexity: licensing genetic resources either embedding or enabled through a proprietary technology**

A good example of emerging complexity in the dissemination of innovation is provided by the SPTA and TELA® maize products developed by CIMMYT with input from multinational companies Corteva (SPTA, a genome edited product) and Bayer (TELA, a genetically modified product). The owners of such proprietary technologies may need to enter, in the first instance, into one agreement with a CGIAR Center to work with a Center's specific genetic resources. Then, the technology owner may separately need to enter into direct bilateral agreements with the downstream partners to adequately address regulatory, stewardship and liability requirements of the parties. To simplify transactional arrangements, the developers of the innovation have separated technology access (direct agreement between technology provider and licensee) from genetic



NERICA rice lines  
Credit: © 2012 AfricaRice/R.  
Raman CC BY-NC-SA 2.0

resources access (direct agreement between CIMMYT and licensee). As the products are disseminated through impact partners beyond the CGIAR, such as non-governmental organizations, seed companies or government agencies, it will be important to monitor how these two types of agreements jointly deliver impact under the CGIAR IA Principles.

## Farmers' Rights

Farmers' rights-related activities and outcomes are relevant to intellectual assets management but appear not to be well-understood and are usually poorly reported in the annual intellectual assets reports. This may show the disconnect between Centers' IP teams and the technical teams providing information on implementation activities for the reports, and the likely difficulties experienced by Centers' IP practitioners in gathering such type of information. We note that current breeding activities do, in fact, routinely support farmers' rights, even when Centers fail to report it explicitly. For example, the breeding targets of the product profiles under the Breeding for Tomorrow Program reflect farmers demand and needs. During the breeding process, on farm evaluation of breeding material using for example the Tricot method empowering farmers to identify the most suitable technologies is routinely used.

## Reporting

One promising step is underway to begin coordinating the reporting of intellectual assets management with the technical reporting carried out for the research programs. This coordination has the dual advantage of simplifying and reducing the reporting burden as well as contextualizing the management of CGIAR intellectual assets in their research programs. Ideally, this will begin to support a more informed analysis of metrics and impact of the strategic management of intellectual assets towards CGIAR research and innovation goals.

## Expected trends

Future application of the CGIAR IA Principles will need to reflect the evolving nature of the CGIAR portfolio deliverables. For example, we can envision that in the future, CGIAR will have a smaller role in developing and disseminating finished varieties, relying increasingly on downstream partners, while supporting product development by partners through genetic resources, research and evaluation technologies, training, etc.

Effective management of intellectual assets and IP rights will need accordingly to continue to contribute in critical ways to the above-discussed evolving paths to impacts. For example,

limited exclusivity agreements are instrumental in attracting investment from the private sector to support the dissemination of CGIAR innovations; restricted use agreements can provide a framework to address required stewardship standards and compliance. CGIAR Centers have also deployed the use of trademarks and industrial design to support general stewardship as well as quality control and assurance of intellectual assets.

The two above-mentioned programs (Scaling for Impact and RAMP), and possibly others, will present the CGIAR Integrated Partnership Board with invaluable learning and important decision-making opportunities regarding the strategic management of CGIAR intellectual assets. The SC IP Group looks forward to learning more about how the Integrated Partnership Board engages on these matters in the future.

In addition, we can anticipate that the inevitable increasing and future use of artificial intelligence, high throughput sequencing and DSI will result in products to be disseminated under multilayered licensing schemes. Issues raised using genomic editing tools and the licensing schemes discussed above will be relevant to dissemination of these products, compliant with the CGIAR IA Principles.



CGIAR

SCIENCE FOR A FOOD-SECURE FUTURE

# Annexes



Women take a drink while collecting water from concrete Taankas, underground rainwater harvesting tanks, built in the Thar Desert near Phalodi.

©Dieter Telemans/Panos Pictures

## Annex 1: Implementation of recommendations from the 2023 CGIAR Intellectual Assets Management Report

This section provides updates on the main recommendation of the SC IP Group made in the 2023 CGIAR Intellectual Assets Management Report.

### Recommendation on report

**streamlining:** Considering the last two reporting cycles and the latest developments taking place at CGIAR to assess performance and results of research-related endeavors, the SC IP Group recommended streamlining intellectual assets reporting in two ways:

1. By standardizing the information required to assess compliance. For example, most Limited Exclusivity Agreements originate from the same Center and are nearly identical in narrative and descriptions, so could be reported in bulk, with distinctive aspects reported by exception. The proposal is to design for 2024 reporting, a template for minimum reporting requirements and public disclosures, which would facilitate Center reporting and assessment of the most salient features of Center IA management by the SC IP Group and all reviewers.
2. By using new tools to report and to review the report. The MEL

interface is notoriously complex and not adapted to the task of global and enterprise-wide Center-based reporting. The SC IP Group proposes to explore using the newly developed dashboard interface, which was created by the CGIAR Portfolio Performance Unit. This unit designed a Results dashboard to be fed with research-based data from CGIAR Centers, gathered through the Performance and Results Management System, and could be opportunistically leveraged for the purpose of contextualized IA reporting, which is integrated into research program evaluations. Beyond simplifying the workload, use of the dashboard would expand its coverage of results of CGIAR projects to include IA and associated IP rights aspects and would offer the advantage of more frequent reporting.

**Response:** Several activities took place during 2024 towards the implementation of this two-pronged recommendation. The CGIAR Legal Affairs Office worked with the CGIAR Digital and Data group to modify the MEL Intellectual Assets (IA) e-Report tool, regarding reporting in bulk limited exclusivity agreements. Centers used this modification for the 2024 report cycle to report the main differential aspects of multiple limited exclusivity agreements while describing once the aspects that were common across the multiple agreements. For example, for 40 licenses reported by CIMMYT, the

Center entered data for features that pertain to each license (e.g., name of the licensee and its location, starting and ending date of the license, targeted geographies of the license) and used one sole description for the aspects common to all 40 licenses. The same occurred with the associated public disclosures, in cases where one public disclosure applied to multiple reported restrictive arrangements. This saved time in reporting for the Center and allowed reviewers to rapidly assess unique vs. common information among the reported licenses.

With respect to new tools for reporting, the present 2024 narrative report is accompanied by an online, publicly available dashboard on registrable intellectual property rights. The CGIAR Legal Affairs Office and the Digital Transformation Accelerator developed a dashboard showing the patents, plant breeders rights and trademarks, filed and granted or registered by the CGIAR Centers and reported by them since 2019. This interactive dashboard will be a pilot dashboard for the likely design and implementation of a more comprehensive intellectual assets dashboard to be released in 2026. Further, as discussed in this report, the 2025-2030 Technical Reporting Arrangements consider the connection and synchronization of intellectual assets and research-based reporting under the 2025-2030 Portfolio.

## Annex 2: Mandate and composition of the System Council Intellectual Property Group

The role of the System Council Intellectual Property (SC IP) Group is to facilitate coordination between the System Council and the CGIAR System Organization by working in cooperation with the System Organization regarding implementation of the CGIAR Principles on the Management of Intellectual Assets and advising the System Council to enable it to provide adequate oversight of IA management in CGIAR.

The SC IP Group receives all CGIAR Centers' intellectual asset reports, which include information and justifications about the CGIAR Centers' limited exclusivity agreements, restricted use agreements, and patent and plant variety protection applications.

To safeguard the sensitive or confidential nature of the material

contained in these reports, or of additional information requested by the SC IP Group, this information is received on an in-confidence basis by the SC IP Group. The SC IP Group then filters this internal information to produce high-level observations and strategic recommendations to both the System Organization and the System Council.

For the review of Centers' 2024 IA reports, the SC IP Group comprised the following two members, who serve in their personal capacity and not as representatives of their affiliated organizations:

- Aline Flower, Bill & Melinda Gates Foundation
- Eric Huttner, Australian Centre for International Agricultural Research

SC IP Group members are appointed by the System Council for a two-year term based on demonstrated expertise and practical experience in the management of IA and IP rights. They can serve for more than one term.

## Annex 3: Article 15 Centers

All 11 CGIAR Research Centers that host germplasm collections in CGIAR Genebanks (termed Article 15 Centers) have agreements with the Food and Agriculture Organization of the United Nations, placing these collections within the purview of the Multilateral System of Access and Benefit Sharing established under the International Plant Treaty. Pursuant to these agreements, Article 15 Centers hold and manage these collections in trust for the benefit of humanity.<sup>1</sup>

**Table. Article 15 Centers**

Center (short name)	Center (full name)
<b>AfricaRice</b>	Africa Rice Center
<b>Bioversity</b>	Bioversity International
<b>CIAT</b>	International Center for Tropical Agriculture
<b>CIMMYT</b>	International Maize and Wheat Improvement Center
<b>CIP</b>	International Potato Center
<b>ICARDA</b>	International Center for Agricultural Research in the Dry Areas
<b>CIFOR-ICRAF</b>	International Centre for Research in Agroforestry
<b>ICRISAT</b>	International Crops Research Institute for the Semi-Arid Tropics
<b>IITA</b>	International Institute of Tropical Agriculture
<b>ILRI</b>	International Livestock Research Institute
<b>IRRI</b>	International Rice Research Institute

1. CIAT and Bioversity International have formed an alliance operating as the Alliance of Bioversity International and CIAT. Since 2022, the integrated Alliance has submitted a single report under the CGIAR IA Principles.

## Annex 4: Glossary

<b>A4IP</b>	Accelerate For Impact Platform
<b>AATF</b>	African Agricultural Technology Foundation
<b>Article 15 Centers</b>	The Centers indicated in Annex 3
<b>CBD</b>	Convention on Biological Diversity
<b>CGIAR IA Principles</b>	CGIAR Principles on the Management of Intellectual Assets
<b>CGIAR Centers</b>	Independent research organizations that are recognized as CGIAR Research Centers as defined in the CGIAR System Framework (presently comprising AfricaRice, the Alliance of Bioversity International and CIAT, CIFOR, ICARDA, ICRISAT, IFPRI, IITA, ILRI, CIMMYT, CIP, IRRI, IWMI, ICRAF, and WorldFish)
<b>CGIAR System</b>	When taken together as a collective, the CGIAR System refers to the CGIAR Research Centers, the Funders, the System Council, the CGIAR System Organization, advisory bodies, and CGIAR Research, as defined in the CGIAR System Framework
<b>CRISPR</b>	It stands for Clustered Regularly Interspaced Short Palindromic Repeats.
<b>DSI</b>	Digital Sequence Information
<b>KALRO</b>	Kenya Agricultural and Livestock Research Organization
<b>International Plant Treaty</b>	International Treaty on Plant Genetic Resources for Food and Agriculture
<b>IPRs or IP rights</b>	Intellectual property rights such as patents, plant breeders' rights, trademarks, copyright, design rights and innovation models, among other registrable forms of IP rights.
<b>MEL</b>	Monitoring, Evaluation & Learning
<b>Multilateral System (MLS)</b>	Multilateral System of Access and Benefit Sharing established under the International Plant Treaty
<b>Nagoya Protocol</b>	Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity
<b>NARES</b>	National Agricultural Research System
<b>PGRFA</b>	Plant Genetic Resources for Food and Agriculture, which are defined in Article 2 of the SMTA as "any genetic material of plant origin of actual or potential value for food and agriculture"
<b>RAMP</b>	Research And Market Pathways
<b>SC IP Group</b>	System Council Intellectual Property Group
<b>SMTA</b>	Standard Material Transfer Agreement of the International Treaty on Plant Genetic Resources for Food and Agriculture
<b>SPTA</b>	Seed Production Technology for Africa



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CGIAR is a global research partnership for a food-secure future. CGIAR science is dedicated to reducing poverty, enhancing food and nutrition security, and improving natural resources and ecosystem services. Its research is carried out by 15 CGIAR Centers in close collaboration with hundreds of partners, including national and regional research institutes, civil society organizations, academia, development organizations and the private sector. We would like to thank all funders who supported this research through their contributions to the CGIAR Trust Fund, along with all other funders and partners.

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