



2014

CGIAR Intellectual Assets Report



Prepared by the CGIAR Consortium Office and the Fund Council Intellectual Property Group

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Executive Summary

This CGIAR Intellectual Assets (IA) Report covers the calendar year 2014, which is the third reporting cycle under the CGIAR Principles on the Management of Intellectual Assets (CGIAR IA Principles). It was developed by the CGIAR Consortium in collaboration with the Fund Council Intellectual Property Group (FC IP Group) and in consultation with the Centers. It includes an independent section, Section 7, from the FC IP Group.

Based on **Center IA reports** and additional information received from the Centers, the CGIAR Consortium and the FC IP Group agree that **all Centers complied with the CGIAR IA Principles** in 2014. In this regard, all Centers submitted to the CGIAR Consortium their boards' assurances of compliance for 2014.

Efforts by the Consortium Legal Team and the FC IP Group to clarify expectations regarding **reporting and the implementation** of the CGIAR IA Principles were reflected in the quality of the reporting and in Center responses to follow-up questions by the CGIAR Consortium and the FC IP Group. Additional room for improvement exists in the reporting of justifications, particularly in support of Restricted Use Agreements (RUAs) and patent applications. The CGIAR Consortium plans on revising the reporting template used by Centers for the 2015 reporting cycle in order to streamline and improve consistency of reporting across Centers and better capture certain aspects not covered in the current template.

Intellectual Property (IP) capacity has remained relatively stable in the CGIAR Consortium and the Centers. The Consortium Legal Team consisted of a full-time General Counsel and a full-time Legal Officer for most of 2014. Ten Centers rely primarily on in-house IP expertise, four Centers rely on both in-house as well as external IP expertise and one Center primarily relies on external IP expertise. Some Centers continued to actively build their own capacity through the participation of their IP and legal staff in IP-related training.

The **CGIAR Legal and IP Network (CLIPnet)** held its fourth annual meeting in Mexico in July and continues to operate as an important coordination and consultation mechanism between the CGIAR Consortium and IP focal points. The FC IP Group participated virtually in a session to exchange observations and questions concerning the second reporting cycle with Center IP focal points. IP webinar sessions, newsletter updates and fact sheets were provided to CLIPnet on a monthly basis throughout the year.

A **biennial review of the CGIAR IA Principles was conducted in 2014**, and the CGIAR Consortium, in consultation with the Centers, and the FC IP Group developed a report providing a joint appraisal on the progress of implementing the CGIAR IA Principles during the first two reporting cycles. The CGIAR Consortium, the Centers and the FC IP Group will in 2015 start discussing how to conduct the 2016 biennial review.

Building on their efforts in 2013 to develop and update policies and practices related to intellectual asset management, **Centers' policy development in 2014 focused predominantly on open access implementation** across CGIAR.

In addition to their many partnerships, the Centers reported concluding in 2014 very few Limited Exclusivity Agreements (LEAs) and RUAs. Indeed, a total of four LEAs were concluded by one Center, and one RUA was concluded by another. This represents a decrease compared with 2012 and 2013, and the biennial review of the CGIAR IA Principles in 2016 will try to ascertain why the number of such agreements is so low. The CGIAR Consortium deemed the justifications provided by Centers for all reported LEAs and RUAs consistent with the CGIAR IA Principles after follow-up questions to Centers received adequate responses. In 2014, one Center requested authorization from the CGIAR Consortium to deviate from the research and emergency exemption requirements for its LEAs, which the CGIAR Consortium rejected.

In terms of **IP protection**, only one Center reported filing patent applications in 2014. No Center reported filing plant variety protection (PVP) or authorizing third parties to do so. Three Centers filed trademarks for either names/logos or products, and a number of Centers provided status updates in regards to trademark applications filed prior to 2014. In 2015, a CGIAR-wide IP portfolio is being developed by the CGIAR Consortium, which will facilitate the tracking of Centers' patent, PVP and trademark applications.

Regarding the **International Treaty on Plant Genetic Resources for Food and Agriculture** (Treaty), the following notable actions were taken: The Treaty Secretariat worked closely with the Centers that host international 'in trust' crop and forage collections to improve their reporting to the Governing Body of the Treaty on their transfers of Plant Genetic Resources for Food and Agriculture (PGRFA) made pursuant to the Standard Material Transfer Agreement (SMTA). All 11 Centers hosting

international 'in trust' crop and forage collections reported to the CGIAR Consortium having used the SMTA when required under the Treaty and confirmed that they either appropriately reported all of their transfers made pursuant to the SMTA to the Treaty Secretariat or are in the process of doing so under guidance from the Treaty Secretariat. In addition, following the request made by the Treaty's Governing Body in 2013 that the Treaty Secretary review the practices of the Centers in relation to transferring PGRFA under Development, a working group issued in 2014 an internal survey on Centers' use of the SMTA when transferring PGRFA under Development. The results of the survey highlighted the need for discussion among the Centers about some of their uncertainties and practices with respect to transferring PGRFA under Development, a discussion that has taken place in 2015. The Treaty Secretary issued its survey on April 27, 2015, and plans to report back on the collected information to the Governing Body's Sixth Session in October 2015. The CGIAR Consortium will follow up with Centers on the information collected ahead of the Governing Body's Sixth Session to identify and address any potential issues. Furthermore, the CGIAR Consortium and Centers participated in 2014 (and continues to participate in 2015) in meetings of the Working Group to Enhance the Functioning of the Treaty's Multilateral System of Access and Benefit Sharing (WG-EFMLS), which is tasked with presenting options for the revision of the Multilateral System of Access and Benefit Sharing (MLS) to the Treaty's Governing Body for consideration at its sixth session in October 2015.

In 2014, Bioversity pursued initiatives to ensure mutually supportive implementation of the Treaty and the **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 (Nagoya Protocol), which entered into force in October 2014. The CGIAR Consortium is currently working closely with Bioversity to coordinate Center IP focal points and genebank managers to identify initiatives and strategies to promote mutually supportive implementation of the Treaty and the Nagoya Protocol and to understand the implications of the implementation of the Nagoya Protocol for CGIAR, including the potential risks regarding the cross-border flow of germplasm.

Overall, the CGIAR Consortium is pleased with the 2014 reporting cycle and Centers' implementation of the CGIAR IA Principles in 2014. It will continue to collaborate with Centers and the FC IP Group to ensure continued improvements in these respects.

FC IP Group Independent Section

The FC IP Group reviewed the Consortium's consolidated IA Report incorporating all Center IA reports, which it discussed with the Consortium Legal Team during a three-day meeting in Montpellier in April 2015. In this third review, the FC IP Group is satisfied with the Centers' consistent progress in terms of compliance, reporting, IP capacity and adoption of best practices. Also, the FC IP Group commends the CGIAR Consortium's various efforts to guide and monitor compliance with and implementation of the CGIAR IA Principles, to continue building a community of practice and to communicate effectively with the FC IP Group.

The FC IP Group has the following recommendations:

- a) that Centers develop and report on their market and dissemination strategy plans in line with the CGIAR Vision as part of the justifications for any patent application and, where possible, for any provisional or Patent Cooperation Treaty (PCT) application in the future;
- b) that Centers consider future approaches for tracking the impact of their LEAs and RUAs on the target beneficiaries;
- c) that Centers share their best practices and effective IP strategies and models with the CGIAR Consortium and other Centers and leverage these resources when drafting agreements and negotiating terms;
- d) that the CGIAR Consortium, in consultation with the FC IP Group, continue to clarify issues related to interpretation of the CGIAR IA Principles; and
- e) that Centers and the CGIAR Consortium continue to build awareness regarding compliance with the Nagoya Protocol and the Treaty's MLS.

Background

This CGIAR Intellectual Assets (IA) Report covers the calendar year 2014, the third reporting cycle under the CGIAR IA Principles.¹

It is submitted by the CGIAR Consortium to the Fund Council in accordance with Article 10.3 of the CGIAR IA Principles, which states that *“the Consortium shall provide annually to the Fund Council a high-level report, satisfactory to the Fund Council, regarding the implementation of the CGIAR Principles during the preceding year.”*

It was developed by the CGIAR Consortium in collaboration with the FC IP Group and in

consultation with Centers. It includes an independent section, Section 7, from the FC IP Group.

This report was developed using information from Center IA reports for 2014 and supplemental information requested from Centers by the CGIAR Consortium and/or the FC IP Group. It takes into account discussions between the Consortium Legal Team and the FC IP Group during a three-day meeting in Montpellier on April 15–17, 2015, during which all Center IA reports were reviewed.

Overview of Center IA reporting and compliance for 2014

2.1 Quality and format of reporting

All Center IA reports followed the same format, using the same reporting template as for the first two reporting cycles, which was developed in 2012.² A question and answer (Q&A) tool initially developed by the Consortium Legal Team in 2013 was updated in 2014 to provide greater guidance to Centers on implementation and reporting of the CGIAR IA Principles.

Section 1 of the Center IA reports provides general information on the implementation of the CGIAR IA Principles, specifically (i) legal and IP capacity at the Centers; (ii) new or updated IP policies; (iii) Centers' IP portfolios; (iv) information showing that the requirements for sound IP management were met; and (v) IA management highlights, case

studies and practices. As these sections are not confidential, they have been shared with all Center IP focal points to help them learn from one another and to inform discussions at the next annual CLIPnet meeting.

The improvements observed in 2013 concerning Section 2 of the Center IA reports regarding LEAs, RUAs and IP applications (i.e., patent and PVP applications) were maintained in the 2014 reports. In general, the justifications supporting these arrangements were detailed, sufficiently explained and required fewer follow-ups than in previous years. However, further improvement is required to ensure that robust justifications are reported at first instance. In most instances where follow-up was

¹ CGIAR IA Principles are accessible at

<http://library.cgiar.org/bitstream/handle/10947/3755/CGIAR%20IA%20Principles.pdf?sequence=1>

² Annex of the Implementation Guidelines is accessible at <http://library.cgiar.org/handle/10947/2846>

required, this concerned issues requiring further clarification or suggestions for improvement, rather than concerns regarding compliance.

To improve consistency of reporting, and make Center IA reports more homogenous and comparable, the CGIAR Consortium plans on revising the reporting template in 2015, in coordination with the Centers and the FC IP Group. The revised template will aim to both streamline reporting and better capture aspects not included in the current template (e.g., mechanisms other than RUAs and LEAs, as well as challenges and different ways of interpreting the CGIAR IA Principles). In addition, the CGIAR Consortium will further update the Q&A, in consultation with Centers and the FC IP Group, to provide guidance on certain grey areas identified during the third reporting cycle.

2.2 Assessment of compliance

Based on Center IA reports and other information submitted by Centers, as well as on the Center boards' assurances of compliance, the CGIAR Consortium considers that all Centers complied with the CGIAR IA Principles in 2014.

IP capacity in the CGIAR Consortium Office and the Centers in 2014

3.1 CGIAR Consortium Office IP capacity in 2014

For most of 2014, the Consortium Legal Team consisted of a full-time General Counsel and a full-time Legal Officer, supported by several consultants regarding specific activities. The General Counsel is the CGIAR Consortium's IP focal point responsible for IP matters in the CGIAR Consortium. The Legal Officer, who assists the General Counsel and primarily handles IP matters, completed the term of his appointment at the end of October 2014. Following an international recruitment process the position was again filled in March 2015, and the new Legal Officer is a familiar face within CGIAR, having previously worked as in-house lawyer at CIMMYT during 2011–2013 and as a consultant to the Consortium Legal Team in 2014. In a restructuring of the role, the Legal Officer

now also directly reports to, and is partially funded by, the Consortium Open Access Team.

The Consortium Legal Team continued to be supported by the Australian Center for Intellectual Property in Agriculture (ACIPA), which contributed to leading monthly IP webinars³ as well as to carrying out initiatives regarding traditional knowledge and farmers' rights.⁴

Due to this limited capacity (two full-time positions for all legal and IP related work, including in relation to open access and data management), the Consortium Legal Team has had to significantly prioritize its work.

³See more information under Section 4.2

⁴See more information under Section 5.7

3.2 Centers' IP capacity in 2014

A significant increase in Center IP Capacity was observed following the adoption of the CGIAR IA Principles on March 7, 2012, with Centers recruiting approximately ten additional legal and/or IP staff during 2012 and 2013. Overall, IP capacity has remained steady throughout 2014, with the majority of Centers reporting either no changes or neutral changes to capacity. Eleven Centers⁵ rely primarily on in-house IP expertise, three Centers⁶ rely on both in-house as well as external IP expertise and one Center⁷ primarily relies on external IP expertise. In addition, in 2014, Centers continued to strengthen their internal IP capacity with external support and by enrolling their staff in IP training and seminars.

Box 1: Examples of Centers strengthening their internal IP capacity in 2014

IWMI, World Fish, CIP, CIFOR, ICRAF and IITA received external legal and IP support, including the provision of training and workshops from a law professor of the University of Cambridge with extensive knowledge of CGIAR.

The IP Focal Point of Africa Rice commenced online IP courses offered by the World Intellectual Property Organization.

The administrative coordinator of IRRI's Legal/IP Team attended an 'IP Summer School' training course offered by the World Intellectual Property Organization and the Intellectual Property Academy of Singapore.

CIP's IP focal point and gene bank curator participated in Plant Breeders Rights training organized by the Peruvian National Institute of Intellectual Property and Consumer Protection (INDECOPI) and the Secretariat of the International Union for the Protection of New Varieties of Plants (UPOV).

3.3 The CGIAR Legal/IP Network

The CGIAR Legal/IP Network (CLIPnet) is a community of practitioners with multidisciplinary backgrounds who are interested in all things legal and IP in CGIAR. It includes the CGIAR Consortium Office, Center IP focal points as well as a wider network (which currently has a total of about 100 members). Services to CLIPnet currently include an intranet site featuring a workspace and a document repository, monthly updates on legal or

IP matters of interest in CGIAR, monthly webinars and training, and a CLIPnet annual meeting. CLIPnet has been an effective network in CGIAR, and satisfaction among members ranked highly in a survey conducted by the CGIAR Consortium in June 2014.⁸ The CGIAR Consortium has noted an increase in engagement and consultation by its members on substantive issues (both among themselves and with the Consortium Office).

⁵ Africa Rice, Bioversity, CIAT, CIFOR, CIMMYT, CIP, ICARDA, ICRISAT, IWMI, IRRI and ILRI

⁶ ICRAF, IITA and WorldFish

⁷ IFPRI

⁸ The results of the satisfaction survey conducted by the CGIAR Consortium are available at <https://library.cgiar.org/handle/10947/3859>

4 Main activities of the CGIAR Legal/IP Network in 2014

4.1 Annual CLIPnet meeting

The fourth annual CLIPnet meeting was held on July 1–4, 2014, at CIMMYT in Mexico. Fourteen of the fifteen Centers were represented and more than thirty participants contributed to the meeting over three and a half days. Participants included (i) Center IP focal points; (ii) a couple of CGIAR Research Program (CRP) directors; (iii) the Consortium's Science Officer and Knowledge Management, Communications and ICT Team; (iv) representatives from ACIPA, the Syngenta Foundation, the Bill and Melinda Gates Foundation and the FC IP Group.

A few of the meeting's highlights follow: The FC IP Group and the Centers shared their observations and questions concerning the second reporting

cycle, and Center IP focal points appreciated this first direct interaction with the FC IP Group, which provided useful insights from the perspective of CGIAR donors. In addition, Centers highlighted their IA management practices and shared examples of LEAs, RUAs and consortium agreements. Implementation of the CGIAR IA Principles was discussed to inform the 2014 biennial review, and learning groups were created to collect evidence regarding Center experiences in their implementation of the CGIAR IA Principles on an ongoing basis.⁹ Issues concerning the Treaty, including possible changes to the SMTA being considered by the Governing Body, and the implications for Centers of the Nagoya Protocol, also received prominent attention.

4.2 Monthly IP webinars

Building on the high level of interest in the 2013 IP webinar series, eight interactive online webinar sessions were conducted in 2014, predominantly in

collaboration with ACIPA, covering a broad range of IP subjects, with a focus on issues relevant to the implementation of the CGIAR IA Principles.¹⁰

⁹ An agenda of the meeting is available at <https://library.cgiar.org/bitstream/handle/10947/3858/Agenda%20CLIPnet%20Annual%20Meeting%20-%20July%202014%20-Final.docx?sequence=1>

¹⁰ The IP webinar topics included (i) recent developments in the patenting of biological materials; (ii) "PlumpyField" network: using patents and trademarks to promote food security; (iii) authorship, ownership and attribution of copyright in Center research outputs; (iv) IP and climate change; (v) disclosure of origin: a persistent distraction or a timely solution; (vi) information obligations of CGIAR Centers under the ITPGRFA; (vii) commercial partnerships and CGIAR Centers research programs: pros and cons for IP management; and (viii) documenting traditional knowledge: challenges and opportunities.

4.3 Monthly updates and fact sheets

The Consortium Legal Team continued to develop a monthly newsletter, covering legal and IP activities of interest in CGIAR as well as relevant system-wide initiatives. Feedback received from CLIPnet has shown that its members value these

monthly updates and see them as useful resources. Factsheets and additional support provided by ACIPA concerning initiatives on farmers' rights and traditional knowledge are highlighted in Box 10 of Section 5.7 below.

4.4 CGIAR open access and data management

The Implementation Guidelines for the CGIAR Open Access and Data Management Policy¹¹ were adopted by the CGIAR Consortium in July 2014. These guidelines were developed by the Consortium Open Access Team in consultation with Center Knowledge Managers and Data Managers, with input from the Consortium Legal Team and CLIPnet.

In 2014, the Fund Council pledged in-principle financial support for the implementation of open access and open data initiatives across CGIAR. In January 2015, the Fund Council approved a USD 2.38 million grant pursuant to a proposal submitted by the Consortium Open Access Team to support assessment, prioritization and coordination of activities for open access and open data for an initial one-year phase.¹² The grant supports a range of activities, including (i) assisting Centers to undertake needs assessments concerning inventory infrastructure and capacity; (ii) developing a framework to prioritize legacy data; (iii) coordinating support to Centers and CRPs in their implementation of the CGIAR Open Access and Data Management Policy and Implementation Guidelines, including developing

implementation plans at Center level; and (iv) developing monitoring and evaluation plans to assess impact. A proposal for phase 2 funding is anticipated to be submitted mid-2015.

The Consortium Legal Team works closely with the Consortium Open Access Team on open access and open data initiatives across CGIAR.¹³ In 2014, these support initiatives consisted mainly of assisting with Center queries concerning the CGIAR Open Access and Data Management Policy and its Implementation Guidelines and coordinating feedback from the Consortium Open Access and Legal Teams on the open access and IP elements of a draft Guidance for CRP 2nd Call document prepared by the CGIAR Consortium in consultation with Centers and other stakeholders. Support activities planned for 2015 include the development of open access support pack elements related to open access licensing and publisher agreements, support in regional open access workshops related to these support pack elements and further coordination concerning guidance on IP and open access elements for the CRP second call full proposals.

¹¹ Implementation Guidelines for the CGIAR Open Access and Data Management Policy are available at https://library.cgiar.org/bitstream/handle/10947/3857/2014_OA_Implementation_Guidelines_FINAL.pdf?sequence=1

¹² The proposal is available at

<https://library.cgiar.org/bitstream/handle/10947/3737/CGIAR%20Open%20Access%20and%20Open%20Data%20Phase%20I%20.pdf?sequence=4> ¹³ Further information concerning open access implementation in CGIAR is available at www.cgiar.org/open

4.5 Biennial review of the IA Principles

The CGIAR IA Principles provide that they “shall be reviewed by the Consortium in consultation with the Centers and the Fund Council in 2014 and every two years thereafter in light of experiences gained.” In 2014, the CGIAR Consortium, in consultation with Centers, and the FC IP Group agreed that it was too early to conduct an in-depth review of the CGIAR IA Principles, which required evidence to be collected over a longer period of time, and instead developed a report providing a joint appraisal on the progress of implementing the CGIAR IA Principles during the first two reporting cycles in light of experiences gained. This report was approved by the CGIAR Consortium Board on October 10, 2014, and submitted to the Fund Council as a background

document for its twelfth meeting in November 2014. As described in the report, the CGIAR Consortium in 2014 strengthened the mechanisms to analyze and build evidence regarding the implementation of the CGIAR IA Principles to inform future review initiatives, by for example creating working groups and conducting bilateral interviews with Center IP focal points to discuss issues of implementation.

The CGIAR Consortium, the Centers and the FC IP Group will in 2015 start discussing how to conduct the 2016 biennial review and in particular the carrying out of a survey with Centers and their CRP partners.

4.6 Working group on guidance for the CRP 2nd call

In 2014, a working group of Center IP focal points reviewed the IP elements of a draft Guidance for CRP 2nd Call document prepared by the CGIAR Consortium in consultation with Centers and other stakeholders for the second round of CRPs. The working group presented their preliminary

recommendations at the 2014 annual CLIPnet meeting and subsequently developed high-level recommendations. The working group will be consulted in 2015 on the development of further guidance concerning the IP elements to be addressed in the CRP second call full proposals.

5 Overview of Centers' implementation of the CGIAR IA Principles in 2014

5.1 Sound management of intellectual assets

As further highlighted in Box 2 below, Centers in 2014 reported a range of initiatives to ensure sound management of their intellectual assets, as required by the CGIAR IA Principles.

Box 2: Examples of Center initiatives to promote the sound management of IAs in 2014

*IITA and IWMI developed **tools to track background and resulting intellectual assets** at project level and to identify ownership and Center's rights of use in regards to such intellectual assets.*

*CIAT conducted a **comprehensive intellectual asset audit** in collaboration with PIIPA (Public Interest Intellectual Property Advisors). Recommendations of interest include that CIAT develop forms for collecting intellectual asset information; that an IP Asset Management Software and System be developed; and that a technology transfer office be set up.*

*CIP developed a **one-page information sheet** summarizing key intellectual asset ownership, licensing and disclosure practices and*

considerations for sharing with partners in advance of entering into collaborations.

*IRRI commissioned a comprehensive **analysis concerning the rice market in the Philippines** to better understand the value chains for its research outputs and to inform its partnerships strategy for reaching target beneficiaries.*

*ILRI developed a **FAQ (frequently asked questions) tool** on the CGIAR and ILRI intellectual asset policies to aid scientists and staff in better understanding the CGIAR IA Principles.*

*ICRISAT **capacity building initiatives** include in-house training for staff as well as 'on-campus' training programs, allowing NARS partners to understand and to seek clarifications on the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty), the Standard Material*

5.2 Center IP policies

Centers continued in 2014 to develop and update their core policies addressing IP management and to develop and update complementary policies and guidelines concerning public-private partnerships, open access and data management, farmers' rights and traditional knowledge, and research ethics and informed consent. Policy development activity in 2014 demonstrated a significant focus on open access, publications, data and information management pursuant to the adoption of the CGIAR Open Access and Data Management Policy in October 2013 and its related Implementation Guidelines in July 2014.¹⁴

The CGIAR Consortium continues to coordinate with Centers to update and maintain a CGIAR-wide IP-related policy portfolio.¹⁵

Box 3: Examples of Center policy activity in 2014

ICARDA adopted a new **IP policy**.

Africa Rice, ICARDA and ICRISAT adopted or revised policies related to **open access, publications, data and information management**, and CIFOR, CIMMYT, ICARDA, CIP, WorldFish and ILRI reported similar policies under development or review.

IITA developed **public-private partnerships guidelines**, and WorldFish is developing a similar policy.

ICARDA is developing a policy addressing **ethics and personal data**, and ICRAF revised its policy concerning **local/traditional knowledge**.

5.3 Center open access initiatives

Further to the adoption of Implementation Guidelines for the CGIAR Open Access and Data Management Policy, a number of Centers reported initiatives in 2014 to further integrate open access practices into their research.

Box 4: Examples of Center open access initiatives in 2014

CIP staff published 80 articles in peer-reviewed journals, of which 35 were published in **open access journals**.

The share of CIFOR's publications that were open access reached 70%, and CIFOR developed a streamlined process to support its scientists with self-archiving in CIFOR's **open access institutional repository**.

IWMI makes available several **web mapping applications and an online data portal** on an open access basis at the Water Data Portal (<http://waterdata.iwmi.org>).

CIAT maintains two operational **open access institutional repositories** for sharing and publishing its information products: CIAT research online on **CGSpace** for publishing all its non-data products

such as publications, tools and videos; and **CIAT Dataverse** for publishing datasets that underpin publications and datasets from completed projects. Information from these two repositories are automatically fed into their website and intranet to display information, such as recent publications, featured products and multimedia.

ICRISAT participates in a regional Initiative of One Agriculture-One Science: A Global Education Consortium to promote **massive open online courses** (MOOCs) for agricultural professionals in India. Additionally, ICRISAT launched an **EXPLORE it** initiative (<http://exploreit.icrisat.org>) that breaks information barriers by making large volumes of agricultural scientific knowledge and information easily accessible to the public. This dynamic site feeds information from databases, using tags, and harvests information from other websites. It operates as a tool to integrate ICRISAT's scientific information, with profiles of all topics, systems, crops, locations and resources where it works.

¹⁴ The CGIAR Open Access and Data Management Policy is available at <http://library.cgiar.org/bitstream/handle/10947/2875/CGIAR%20OA%20Policy%20-%20October%202%202013%20-%20Approved%20by%20Consortium%20Board.pdf?sequence=1> and its Implementation Guidelines are available at https://library.cgiar.org/bitstream/handle/10947/3857/2014_OA_implementation_Guidelines_FINAL.pdf?sequence=1

¹⁵ The CGIAR-wide IP-related policy portfolio is available at <https://library.cgiar.org/handle/10947/3899>

5.4 Center partnerships, including Limited Exclusivity Agreements and Restricted Use Agreements

5.4.1 Limited Exclusivity Agreements and Restricted Use Agreements

Under articles 6.2 and 6.3 of the CGIAR IA Principles, the CGIAR Consortium and/or Centers “may grant limited exclusivity for commercialization of the respective Intellectual Assets they produce” (LEAs) and “may enter into agreements for the acquisition and use of third party Intellectual Assets that restrict the global accessibility of the products/services resulting from the use of such Intellectual Assets for commercialization, research and development” (RUAs), provided that certain conditions are fulfilled.

5.4.1.1 Limited number of LEAs and RUAs

The CGIAR Consortium itself did not conclude any LEAs or RUAs in 2014. Centers concluded very few LEAs and RUAs in 2014. Indeed, in total, four LEAs were reported by CIMMYT, and one RUA was reported by IITA. This represents a decrease compared with 2012 and 2013. For 2012, seven LEAs and eight RUAs were reported, and for 2013, seven LEAs and three RUAs were reported by Centers. The biennial review of the CGIAR IA Principles in 2016 will try to ascertain why the number of such agreements is so low.

The justifications provided by the Centers for the LEAs in 2014 were deemed consistent with the CGIAR IA Principles by the CGIAR Consortium after follow-up questions to Centers received adequate responses. Indeed, for all LEAs, CIMMYT provided justifications for exclusivity, which in each case was as limited as possible and necessary for the further improvement of the intellectual assets or to enhance the scope or scale of impact on target beneficiaries, in furtherance of the CGIAR Vision. For the RUA reported, IITA declared that they were, to the best of their knowledge, unable to acquire equivalent intellectual assets from other sources under less restrictive conditions and that the products or services that are intended to result from their use would further the CGIAR Vision.

All Centers have publicly disclosed information on their LEAs and RUAs, and the CGIAR Consortium maintains a publicly accessible register¹⁶ consolidating such information.

Box 5: Examples of LEAs and RUAs reported in 2014

LEA example: CIMMYT entered into a Research and Development Agreement with an organization that supports the grains industry in a developed country. The agreement creates a framework for cooperative crops research. Exclusive rights are granted to the organization to commercialize research project outputs and to apply for registered IP rights, limited to the developed country, which is not a target territory for CGIAR. Research project outputs are explicitly stated to remain available at all times for non-commercial research conducted by public sector organizations and in the event of a national or regional food security emergency. CIMMYT will need to report project-specific agreements entered into pursuant to this framework as LEAs and in each instance the justifications provided in support of the project shall be evaluated to ensure compliance with the CGIAR IA Principles.

RUA example: IITA entered into a supply agreement with a multinational seed company, pursuant to which IITA enters into statements of work (SOW) with local subsidiaries of the multinational for the provision of services by IITA. Pursuant to this framework, IITA provided evaluation and screening support for local adaptation and a skills development program, both related to Nigeria, in which the local subsidiary’s intellectual assets were accessed without IITA being entitled to disseminate the resulting products and services. IITA declared that they were, to the best of their knowledge, unable to acquire equivalent intellectual assets from other sources under less restrictive conditions. IITA stated that the products and services resulting from the use of these intellectual assets would further the CGIAR Vision by making high-quality seeds of adapted maize and vegetable hybrids and appropriate cost-effective production packages available to and used by farmers to improve their maize and vegetable production in Nigeria.

¹⁶This register is accessible at <http://www.cgiar.org/IAmanagement>

This vision will be realistically achieved absent dissemination by IITA because the seed sector in Nigeria is geared toward small-holder farmers (about 90% of the farmers in Nigeria are small-holder farmers with 0.5 to 3 hectares of land, smaller even for vegetable production), and so the seed industry

must service small-holder farmers to remain viable. Further, in regards to future SOWs negotiated, it is anticipated that IITA will retain dissemination rights in the resulting products and services if any IITA plant materials are used in their development (which was not the case in this instance).

5.4.1.2 Requests to deviate from the research and emergency use exemptions in LEAs

Article 6.2.1 of the CGIAR IA Principles requires LEAs to be subject to certain research and emergency use exemptions, which ensure that the intellectual assets that are to be exclusively commercialized by a third party remain available for use by public sector organizations for non-commercial research purposes and for use in food emergencies anywhere in the world. The CGIAR IA Principles allow Centers to request approval from the CGIAR Consortium to deviate from these exemption requirements in their LEAs if compelling reasons are provided.

This possibility of requesting deviations from the research and/or emergency use exemptions has hardly been used by Centers. Indeed, in 2014, the CGIAR Consortium received only one deviation request, which was the second submitted to the CGIAR Consortium since the CGIAR IA Principles entered into force.¹⁷ In 2014, CIMMYT submitted a technology specific request seeking to deviate

from the exemption requirements in any LEA involving plant varieties constituting genetically modified organisms (GMOs) because these require stringent stewardship protocols to be followed in their dissemination, which conflicts with the research and emergency use exemptions. The request identified legitimate reputational and liability concerns associated with making GMOs available to third parties, absent the necessary stewardship controls. Although the request was considered to be of a compelling nature, the CGIAR Consortium, after consulting the FC IP Group, determined that the CGIAR IA Principles explicitly require each deviation request to relate to a specific LEA and do not allow blanket deviation requests relating to all LEAs based on a certain technology. The CGIAR Consortium requested that CIMMYT submit its deviation requests for each LEA related to GMOs for consideration by the CGIAR Consortium on a case-by-case basis.

5.4.2 Other partnerships

In addition to LEAs and RUAs, the Centers concluded many other types of partnerships to maximize impact, as further highlighted in Box 6 below.

Box 6: Other examples of partnerships concluded by Centers to maximize impact

ICRISAT's **Hybrid Parent Research Consortia (HPRC)** currently in Phase 4 (2014–2018) involves 29 seed companies (23 pearl millet, 4 sorghum, 2 pigeon pea). This platform provides public and private sector members access to ICRISAT breeding materials on a non-exclusive basis. These agreements are not LEAs; however, ICRISAT explicitly includes the research and emergency exemptions in these agreements. Following the success of this model, ICRISAT expects to launch a similar consortium in the eastern and southern Africa region in 2015.

CIAT entered into a **multiparty agreement to support**

research between collaborators in Colombia and Japan to develop resource-efficient rice production techniques for implementation in Colombia. The project seeks to produce, among other things, new breeding lines with higher water and nitrogen efficiencies and scalable resource-efficient crop management and fertilization strategies. The results of the project are initially deemed confidential; however, a disclosure mechanism that does support CIAT to promptly and broadly disseminate project results is included. Each party retains the right to control the commercial dissemination of the project outputs it produces or co-produces and obtains a non-exclusive, non-commercial, royalty free license to use in Colombia and Japan the project outputs produced by other collaborators without its involvement. CIAT has highlighted

¹⁷The first deviation request received and approved by the Consortium in 2013 is reported in the 2013 CGIAR IA Report, approved by the Consortium Board on October 10, 2014 (available at <https://library.cgiar.org/bitstream/handle/10947/3404/CGIAR%20IA%20REPORT%20%28Revised%20%26%20CB%20approved%2010%20Oct%202014%29.pdf?sequence=1>)

this as an agreement that required considerable effort to negotiate, given the number of parties involved, and is pleased with the ownership and licensing arrangements that uphold CIAT's rights to use and disseminate.

*IITA in 2014 obtained approval from the food and drug regulatory body in Nigeria to **manufacture and release an aflatoxin biocontrol product Aflasafe™**. It then established a high throughput manufacturing trial factory, in which it manufactured 135 tons of Aflasafe, and sold nearly 100 tons of Aflasafe to farmers and for other projects. Expressions of interest were received from various organizations to either lease the factory or take over commercialization and*

distribution of the product. In Kenya, a NARS partner operating under the strategic guidance and technical leadership of IITA has applied for approval and release for the aflatoxin biocontrol product (provisionally approved for one year, subject to further tests), and the construction of a modular manufacturing plant, has commenced, which IITA will build and hand over in 2015. In both instances, IITA has yet to determine whether the exploitation of the product will proceed on an exclusive basis and continues to evaluate whether such rights may be necessary to incentivize partner investment and to maximize global accessibility.

5.5 Patents, plant variety protection and trademarks

Under Article 6.4.2 of the CGIAR IA Principles, "Centers shall carefully consider whether to register/apply for (or allow third parties to register/apply for) patents and/or plant variety protection ("IP Applications") over the Centers' respective Intellectual Assets. As a general principle, such IP Applications shall not be made unless they are necessary for the further improvement of such Intellectual Assets or to

enhance the scale or scope of impact on target beneficiaries, in furtherance of the CGIAR Vision."

The CGIAR Consortium itself did not file any patents or PVP applications, nor did it register any trademarks in 2014. Centers' activity in 2014 regarding PVP, patent and trademark applications or registrations is described below.

5.5.1 Plant variety protection

Centers did not report having applied for PVP or having authorized third parties to apply for PVP over Center plant materials in 2014. CIP, however, reported a PVP being granted to a third party without CIP's consent as the breeder of the variety, as required pursuant to Peru's national PVP law.

CIP is actively engaged in discussions with the PVP regulatory authority and the PVP holder to ensure dissemination to CIP's target beneficiaries is not compromised and is also reviewing preemptive or defensive IP strategies it can adopt to ensure that unauthorized PVP does not occur in the future.

5.5.2 Patents

IRRI is the only Center that applied for patents in 2014. IRRI filed five international applications pursuant to the Patent Cooperation Treaty (PCT) applications and one utility patent application with the United States Patent and Trademark Office (USPTO). All of these applications were also

the subject of provisional applications filed with the USPTO as reported by IRRI in 2013. One of the PCT applications and the US utility patent application are filed jointly with a partner, JIRCAS, and the remaining applications are filed solely by IRRI.

5.5.2.1 PCT applications

PCT applications do not in and of themselves lead to the granting of a patent because they require subsequent national or regional patent applications to be filed in each jurisdiction that a patent is desired. In this regard, they are similar to provisional patent applications, which require an additional filing to mature into a patent. Both provisional and PCT filings are typically used strategically to lock in a priority date while further analysis and decisions are made in regards to obtaining a full patent. IRRI has not yet developed any product development or dissemination plans or done any detailed market analysis and therefore has not yet made any decisions about patent protection in any specific territories. The justifications provided by IRRI to pursue PCT

applications while further analysis and decisions are made in regards to obtaining a full patent are deemed acceptable for the PCT filing stage. However, if further patents are filed in 2015 by IRRI at national or regional level, IRRI will need to provide further information on IRRI's strategy regarding the use of these patents in its 2015 IA Report. The CGIAR Consortium and the FCIP Group strongly encourage Centers to include in their justifications for provisional and PCT filings an outline regarding their anticipated development and dissemination strategy. They also encourage Centers to engage with the CGIAR Consortium early on while reflecting on and/or developing their filing strategies.

5.5.2.2 US utility patent application

IRRI clarified that the US utility patent application had been filed for both a defensive purpose, designed to maximize global accessibility, and for facilitating exploitation of the invention in the US. By limiting the patent application to the US, the disclosure of the invention is intended to operate globally as a bar to patent protection in other jurisdictions, thereby ensuring the technology is available for use by IRRI and third parties outside of the US without restriction. Securing a patent in the US ensures IRRI is in the strongest position possible to incentivize the further investment required to achieve commercial exploitation of the invention in the US. In addition, IRRI clarified that any future

revenue generated from the commercial exploitation of the patent would be invested in research that furthers the CGIAR Vision. Overall, the CGIAR Consortium deemed the justifications provided by IRRI for the US utility patent application to be acceptable, but they could have been further strengthened by additional information concerning product development, dissemination strategy or a market analysis, albeit at a preliminary level, to provide some insight into how IRRI expects future revenue to be generated from the commercial exploitation of the patent and to be invested in research that furthers the CGIAR Vision.

5.5.3 Trademarks

Three Centers reported applying for trademark registrations in 2014. CIAT and World Fish applied to register their name and logo in countries in which they operate. ICRISAT applied to register a trademark intended to facilitate dissemination of its intellectual assets as further highlighted in Box 7 below. A number of Centers reported the registration of pending applications, one of which is also highlighted in Box 7 below.

Box 7: Examples of Centers' use of trademarks as part of their intellectual asset dissemination strategy

WorldFish had a two-fold rationale for trademarking 'GIFFISH': quality control and dissemination. For years, the Tilapia variety had been informally referred to as GIFFISH and was associated with WorldFish. WorldFish wished to ensure that no other entity could adopt the brand name, particularly in relation to the marketing of an inferior product. Here, the trademark is very important as the superior quality associated with GIFFISH drives demand

throughout the following supply chain: once a fish variety is ready to be released widely, fingerlings/fry are provided to private and public sector multiplication centers and/or hatcheries, which in turn sell to private sector fish producers. WorldFish is also working on improving varieties of Rohu and Carp, which could also benefit from a trademarked release into the markets.

ICRISAT conceived 'GreenPHABLET' as an idea for an electronic device that integrates phone and tablet technology primarily for use in the aggregation and

dissemination of agricultural data and information. ICRISAT applied for a trademark to ensure **(cont.) GreenPHABLET** would be available to facilitate future dissemination of the device and as a defensive strategy to prevent misappropriation. ICRISAT will ensure that the licensing of GreenPHABLET and commercialization arrangements with partners support distribution of the device to recipients in developing countries for non-profit, educational, training and humanitarian purposes.

IITA's dissemination and quality control strategy in regards to the aflatoxin biocontrol product described in Box 6 relies on licensing of trademarks associated with the product name '**Aflasafe**'. Trademark registrations have been obtained in Kenya and Nigeria, and further trademark applications are being considered regionally to support scale up in the commercialization of Aflasafe in ten additional countries, including Senegal, Gambia, Burkina Faso, Ghana, Uganda, Tanzania, Mozambique, Malawi and Zambia.

5.5.4 CGIAR IP portfolio

In 2015, the CGIAR Consortium is developing a CGIAR-wide IP portfolio, which will facilitate the tracking of Centers' patent, PVP and trademark applications.

5.6 International Treaty on Plant Genetic Resources for Food and Agriculture

The International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty) creates a framework for farmers, research organizations, NGOs, plant breeding and seed companies, and governments to coordinate activities conserving, improving and sustainably using plant genetic resources for food and agriculture (PGRFA) and to equitably share benefits derived from the use of those resources. CGIAR is committed to fully implementing and complying with the Treaty.

Eleven CGIAR Centers¹⁸ that host international 'in trust' crop and forage collections signed agreements with the Treaty's Governing Body in 2006, placing those collections with the Treaty's

MLS. Pursuant to those agreements, the CGIAR Centers distribute Annex 1 materials from those collections, using the Standard Material Transfer Agreement (SMTA). Additionally, Centers make non-Annex 1 'in trust' materials available using the SMTA. The CGIAR Centers also use the SMTA to distribute derived materials, developed by Centers' breeding and research programs that incorporate PGRFA from the MLS.

Each year, the CGIAR Centers distribute approximately 500,000 samples of PGRFA to recipients around the world under the SMTA, with approximately 86% sent to developing countries and countries with economies in transition.¹⁹

5.6.1 Center use of the SMTA and reporting to the Treaty's Governing Body

The Treaty Secretariat worked closely with the Centers hosting international 'in trust' crop and forage collections throughout 2014 (and also into 2015) to improve the formatting and content of their reporting of transfers of PGRFA with the SMTA as required by the Treaty. All Centers hosting

international 'in trust' crop and forage collections confirmed that they appropriately reported all of their transfers made, pursuant to the SMTA, to the Treaty Secretariat, or are in the process of doing so under guidance from the Treaty Secretariat.

¹⁸These eleven Centers comprise Africa Rice, Bioversity, CIAT, CIMMYT, CIP, ICARDA, ICRISAT, IITA, ILRI, IRR and ICRAF.

¹⁹CGIAR submission to the 3rd Session of the WG-EFMLS dated May 13, 2015, is available at

<https://drive.google.com/a/cgexchange.org/file/d/0B9ir4NzX2MW2U28tWC1VQIJJMGM/view?usp=sharing>

Box 8: Example of Centers' use of tools to facilitate reporting pursuant to the SMTA

In 2014, IRRI developed, in collaboration with the Treaty Secretariat, the Easy-SMTA XL system, designed for large-scale reporting. Several CGIAR Centers have adopted this system to manage their SMTA reporting obligations.

Following the request made by the Treaty's Governing Body in 2013²⁰ that the Treaty Secretary review the practices of the Centers in relation to transferring PGRFA under Development, a working group consisting of Bioversity's Policy Research Unit and several Center genebank and IP representatives developed and circulated an internal survey on Centers' use of the SMTA when transferring PGRFA under Development in May 2014. The purpose of this internal survey was to engage in a comparative analysis of how Centers handle PGRFA under Development so that the Centers could provide a more informed and coherent response to the Treaty Secretariat than might otherwise be possible. The results of the survey highlighted the need for discussion among the Centers about some of their uncertainties and practices with respect to transferring PGRFA under Development. The Consortium Office organized a teleconference with Center IP focal points and genebank managers for this discussion to take place in 2015. The Treaty Secretary has issued its survey on April 27, 2015²¹, and plans to report back on the collected information to the Governing Body's Sixth Session in October 2015. The CGIAR Consortium will follow up with Centers on the information collected ahead of the Governing Body's Sixth Session to identify and address any potential issues.

5.6.2 CGIAR participation in the review of options to enhance the functioning of the MLS

The CGIAR Consortium and Centers participated in 2014 in meetings of the WG-EFMLS. The WG-EFMLS is tasked with presenting options for the revision of the MLS, including the benefit sharing provisions under the SMTA, to the Governing Body for consideration at its sixth session in October 2015. Given CGIAR's commitment to fully implement

and comply with the Treaty, a revision of the MLS could have wide reaching implications for CGIAR. The CGIAR Consortium has worked closely with Centers in 2015 to develop a position on the options under consideration²² and to participate in the third meeting of the WG-EFMLS to be held in June 2015.

5.6.2 Mutually supportive implementation of the Treaty and the Nagoya Protocol

The 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 (Nagoya Protocol) entered into force in October 2014, upon reaching the threshold of ratification by 50 countries to enter into force. Unlike the MLS established pursuant to the Treaty, which allows facilitated access to certain PGRFA with a pre-established framework for access and benefit sharing, the Nagoya Protocol creates a bilateral system of access and benefit sharing requiring prior informed consent in regards to the access and use of genetic resources and associated traditional knowledge.

Coordination exists at treaty level for the mutually

supportive implementation of the Treaty and the Nagoya Protocol. However, whether this is achieved in practice depends on implementation of these treaties at national level. Implementation in a manner that is not mutually supportive has the potential to adversely impact the germplasm transfer operations of Centers, particularly in regards to countries which have ratified the Nagoya Protocol and which have not ratified the Treaty. For this reason, and as further highlighted in Box 9 below, Bioversity pursued initiatives in 2014 to promote mutually supportive implementation of the Treaty and the Nagoya Protocol. The CGIAR Consortium is currently working closely with Bioversity to coordinate Center IP focal points and genebank managers to identify initiatives and strategies to promote mutually supportive

²⁰ This request was made by the Treaty's Governing Body and its fifth session in September 2013 in Oman.

²¹ The survey is available at

<https://drive.google.com/a/cgxchange.org/file/d/0B9ir4NzX2MW2QmJSRUcyXy1yVVU/view?usp=sharing>

²² CGIAR submission to the 3rd Session of the WG-EFMLS, dated May 13, 2015, is available at

<https://drive.google.com/a/cgxchange.org/file/d/0B9ir4NzX2MW2U28tWC1VQIJJMGM/view?usp=sharing>

implementation of the Treaty and the Nagoya Protocol and to understand the implications of the implementation of the Nagoya Protocol for CGIAR

and the potential risks regarding the cross-border flow of germplasm.

Box 9: Example of Center initiatives to ensure mutually supportive implementation between the Treaty and the Nagoya Protocol

In 2014, Bioversity co-organized a **workshop** with the ABS Capacity Development Initiative and the Secretariats of the Convention on Biological Diversity and the Treaty. Mutually supportive implementation between the Treaty and the Nagoya Protocol was a key focus of the workshop, which

brought together both the national focal point for the CBD/Nagoya Protocol and the Treaty from 20 countries, along with representatives of other stakeholder groups and expert resource persons. Bioversity is coordinating a process, ongoing into 2015, working with national Treaty focal points and policy experts to develop policy, legal and administrative instruments and guidelines for national implementation of the Treaty.

5.7 Traditional knowledge and farmers' rights

Article 3 of the CGIAR IA Principles recognizes the indispensable role of farmers, indigenous communities, agricultural professionals and scientists in conserving and improving genetic resources. Further, Centers are required to be respectful of national and international efforts to protect and promote farmers rights as envisaged by the Treaty and to support the development of appropriate policies and procedures for their recognition and promotion. Box 10 below highlights several initiatives undertaken in 2014 concerning traditional knowledge and farmers' rights.

Box 10: Example of initiatives in 2014 concerning traditional knowledge and farmers' rights

The Consortium published an article, written by the Communications Consultant to the Consortium Legal Team, entitled 'Old knowledge and new science: using traditional knowledge in CGIAR research' (<http://www.cgiar.org/consortium-news/old-knowledge-and-new-science-using-traditional-knowledge-in-cgiar-research/>).

ACIPA prepared a fact sheet concerning farmers rights (available via the CLIPnet site: (<https://sites.google.com/a/cgxchange.org/clip-net/home/capacity-building/factsheets>) and presented webinars concerning documenting traditional knowledge and disclosure of origin (<https://sites.google.com/a/cgxchange.org/clip-net/home/capacity-building/factsheets>). A member of ACIPA visited CIP to conduct interviews with scientists and to work with the IP focal point to develop processes for access and documentation of traditional knowledge associated with genetic resources. This support included a seminar attended by over 70 people within the organization, and recordings were made available to regional offices.

CIP Genebank and the Genetic Resources Unit continued and strengthened their ongoing partnerships and collaborative work with local farmer communities in the Andes region. CIP recognizes these communities as the guardians of the genetic diversity of potatoes, sweet potatoes and Andean roots and tuber crops (its mandated crops) and aims at promoting and supporting their work. A collaboration with the Parque de la Papa (the Potato Park) in Pisac, Peru, fosters the exchange of information and knowledge between scientists and traditional farmers through which the repatriation of clean, virus and pathogen free germplasm is an example of direct benefit sharing with farmers.

5.8 management at CGIAR Research Program level

To obtain a more nuanced account on intellectual asset management in CRPs, the CGIAR Consortium requested the Centers to include in their 2014 Center IA reports information on efforts to develop or improve intellectual asset management within CRPs. A broad range of CRP-related initiatives were reported by Centers in 2014, some of which are highlighted in Box 11 below. The CGIAR Consortium plans to revise the reporting template in 2015 to ensure that Center IA Reports are more homogenous and comparable in this regard.

Box 11: Examples of initiatives concerning intellectual asset management at CRP level

ICRISAT reported **major intellectual asset outputs** for 2014 in the CRPs it leads on Grain Legumes and Dryland Systems. This included information concerning elite lines and varieties entering national performance trials or released by CRP partners; breeder, foundation and certified seed production; and publications and datasets.

ILRI provided **examples of model clauses** it uses in agreements with collaborators in the Livestock and Fish CRP it leads, including in regards to IP ownership and licensing, data sharing, publications, publicity and branding.

IITA provided information concerning its open licensing practices and the repositories used for making open access the publications and data generated within the Humid tropics CRP that it leads.

CIP, which leads the Roots, Tubers and Bananas (RTB) CRP, reported hosting the first RTB **Program Advisory Committee** meeting during which a special session was dedicated to intellectual asset management and open access implementation in RTB.

ICARDA reported that the Drylands CRP, in which it participates, has set up an **internal IP Working Group** to discuss key IP issues within the CRP and to ensure strong and clear communication is maintained with CRP partners on the implementation of the CGIAR IA Principles.



The CGIAR Consortium's conclusion

Overall, the CGIAR Consortium is satisfied with Centers' implementation of the CGIAR IA Principles in 2014 as well as with the quality of Center IA Reports during the third cycle of reporting. The CGIAR Consortium's plans to revise the reporting template in 2015, in coordination with the Centers and the FC IP Group, should further improve Center reporting based on lessons learned during the first three reporting cycles. In particular, the revised

reporting template should make the Centers' reports more homogenous and streamlined and should better capture aspects not included in the current template (e.g., mechanisms other than RUAs and LEAs as well as challenges and different ways of interpreting the CGIAR IA Principles). In parallel to the revision of the reporting template, the CGIAR Consortium will provide, in coordination with the Centers and the FC IP Group, further

guidance to Centers on implementation and reporting by providing clarifications on certain grey areas identified during the third reporting cycle as well as on flexibilities contained in the CGIAR IA Principles.

The focus of the CGIAR Consortium and the FC IP Group is now moving beyond compliance toward better understanding Center challenges in implementing the CGIAR IA Principles and better supporting Centers in taking innovative approaches in their dissemination and commercialization pathways. Indeed, the CGIAR IA Principles are meant to encourage, following certain parameters, the Centers' partnership efforts, particularly with the private sector, to help scale up innovations and reach more small-holder farmers.

It is still unclear why so few, and a decreasing number of, LEAs and RUAs were concluded by Centers over the first three reporting cycles, e.g., whether this is due to lack of opportunity, difficulty in using these tools, other types of partnerships being concluded that are not captured by the reporting on LEAs and RUAs, etc. The revised reporting template as well as the biennial review of the CGIAR IA Principles to be conducted in 2016, and which the CGIAR Consortium will begin to discuss with the FC IP Group and Centers in 2015, should both help address this question.

In addition to its role in overseeing implementation of the CGIAR IA Principles, the CGIAR Consortium now has more of a focus on genetic resources policy-related work. The CGIAR Consortium has in 2015 been active in developing a CGIAR Consortium position paper on options for the

enhancement of the MLS, preparing Centers for the Treaty Secretary's survey to review Center practices regarding PGRFA under Development and coordinating discussions on the implications for CGIAR of the newly effective Nagoya Protocol. The CGIAR Consortium plans to remain active in coordinating discussions or initiatives on these fronts, leveraging Center expertise and experience. In particular, the CGIAR Consortium will follow up with Centers on the results of the Treaty Secretary's survey to identify and address any potential issues ahead of the Governing Body's Sixth Session. The CGIAR Consortium will also continue to work on understanding the implications of the implementation of the Nagoya Protocol for CGIAR and the potential risks regarding the cross-border flow of germplasm.

Another role for the Consortium Legal Team in 2015 is to prepare for the second round of CRPs,²³ in coordination with the Centers and the FC IP Group. Some key aspects of this work will be to further develop the sections on intellectual asset management in the CRP Second Call Guidance for Full Proposals document, which will be developed in 2015.

Finally, the CGIAR Consortium acknowledges that, due to unanticipated budget cuts across CGIAR in early 2015, funding challenges may exist in CGIAR in ensuring adequate IP capacity and activities for the effective implementation of the CGIAR IA Principles. In this context, the CGIAR Consortium would like to emphasize the importance of adequate funding and capacity for intellectual asset management for CGIAR to be able to deliver on its Vision.

²³The second round of CRPs will begin in 2017.

7 FC IP Group independent section

7.1 Introduction

This Section 7 presents the FC IP Group's update to the Fund Council on its work as well as its findings regarding the third review of the Centers' compliance with the CGIAR IA Principles, based on information made available to the FC IP Group by the CGIAR Consortium. The reporting window was limited to calendar year 2014, and the information reviewed included the CGIAR Consortium's Consolidated IA Report (which included all Center IA Reports) as well as discussions with the Consortium's legal team²⁴ on April 15–17, 2015, in Montpellier, France. During these discussions, the FC IP Group raised a number of questions about the Centers' reports, and the Centers' responses further informed the conclusions in this section.

The findings, opinions and recommendations discussed in more detail hereafter represent the FC IP Group members'²⁵ professional views in their advisory role to the Fund Council and do not necessarily reflect the views of the organizations or entities with which the members are affiliated.

In addition to recommendations for the Fund Council's consideration, this section also includes positive highlights and other developments. Overall, the FC IP Group is satisfied with the Centers' compliance with the CGIAR IA Principles. Also, there continues to be progress in terms of Center reporting, IP capacity and adoption of best practices.

7.2 2014 Biennial review and extension of the CGIAR IA Principles

Since the CGIAR IA Principles were approved by the Fund Council on an interim basis for two reporting cycles in March 2012, the FC IP Group communicated to the Fund Office the following recommendations: 1) that the Fund Council should be explicit that the applicability of the CGIAR IA Principles be extended indefinitely, consistent with previous FC IP Group discussions with the Fund Office; 2) that the extension of the CGIAR IA Principles be approved inter-sessionally, pursuant to a Fund Council non-objection vote; and 3) that possible revisions to the CGIAR IA Principles may be considered when the 2016 biennial review of the CGIAR IA Principles is conducted, as required pursuant to Article 12 of the CGIAR IA Principles.

It is important to note that the Consortium, in consultation with the FC IP Group, wrote a report on the 2014 biennial review of the CGIAR IA Principles. Given that the approval of such a report was not included by the Fund Office in the agenda of the 12th Fund Council meeting, the CGIAR Consortium and the FC IP Group discussed the appropriate procedure for Fund Council approval of the report. The FC IP Group communicated to the Fund Office its recommendation that the report on the 2014 biennial review of the CGIAR IA Principles be approved inter-sessionally in 2015, pursuant to a non-objection vote.

²⁴Elise Perset, General Counsel, and Rodrigo Sara, Legal Officer.

²⁵The FC IP Group Members are Paul Figueroa (Chair, USAID), Bram De Jonge (Wageningen) and Aline Flower (Bill & Melinda Gates Foundation); Maria José Amstalden Moraes Sampaio (Embrapa), a former Member of the FC IP Group, stepped down in May, 2014, and Aline Flower joined the FC IP Group in April, 2015.

7.3 Compliance with the CGIAR IA Principles

7.3.1 Limited Exclusivity Agreements (LEAs)

As per Section 5.4.1.1 above, only one Center (CIMMYT) signed LEAs, four in total. As required by the Principles, three LEAs²⁶ include the research and emergency exemptions, and the Center explained the rationale for the exclusivity or semi-exclusivity arrangements. The Center explained that the exclusivity provided is limited in duration, territory and/or field of use. The FC IP Group is satisfied with the justifications provided by CIMMYT in regards to these LEAs. One of these LEAs is highlighted under the Positive Highlights Section as a model LEA that aims to disseminate IP to further the CGIAR Vision. As required by the CGIAR IA Principles and their Implementation Guidelines, the Center also made public disclosures, including via press releases and Center news and blog updates on the LEAs signed during 2014.

As per Section 5.4.1.2 above, one Center (CIMMYT) submitted a request to deviate from the research and emergency use exemptions required to be included in their LEAs involving GMO technologies. This is the second time a deviation has been requested.²⁷ CIMMYT requested a blanket deviation for both the research and emergency exemption in any LEA that involves GMO technology on the basis that such technology requires stringent stewardship protocols, which preclude the possibility (without running into serious liability risks) of making the same technology available to third parties under these exemptions. The Consortium Office discussed this deviation request in depth with the FC IP Group. The FC IP Group advised denying the request given that the CGIAR IA Principles do not allow for blanket deviations. In addition, the FC IP Group advised the CGIAR Consortium and CIMMYT to explore the possibility of including research and emergency exemptions with a more restricted scope that take the necessary stewardship considerations into account in future deviation requests for LEAs that involve GMO technologies.

7.3.2 Restricted Use Agreements (RUAs)

As per Section 5.4.1.1 above, one Center (IITA) entered into a RUA. For the first time, the FC IP Group requested a copy of the full agreement from this Center to acquire a better understanding of the agreement. Based on a thorough review of that agreement, the FC IP Group concluded that the Center's role in the arrangement appeared to constitute substantive collaborative research consisting of providing training in best agronomic practices as well as co-developing and implementing protocols for crop production for the purpose of getting partner seed to farmers. The agreement was not specific as to which farmers would have access in the developing country. Initially, the FC IP Group felt that the Center may have been able to negotiate more substantive license rights to the resulting hybrid varieties, even further advancing the CGIAR Vision. However, after a review of the full agreement and IITA's response clarifying that the resulting hybrid varieties do not incorporate IITA's breeding materials, the FC IP Group is satisfied with the justifications provided and considers that IITA did its best during the negotiations of the terms of the agreement, which is anticipated to be a first step in a longer term collaboration with the third party. The FC IP Group has included a recommendation for Centers to maximize their leverage in negotiations by drawing from both Center-wide best practices and CGIAR Consortium resources to achieve the CGIAR Visioning future negotiations.

²⁶The fourth LEA complied with the emergency exemption requirement and did not contain a research emergency exemption as per a deviation request approved by the Consortium in 2013 as detailed further in footnote 27 below.

²⁷In 2013 a request submitted by CIMMYT to deviate from the research exemption requirement was approved by the Consortium after having been found to be compelling on the basis of the supporting information provided. (See Section 5.4 of the 2013 CGIAR Intellectual Assets Report available at <https://library.cgiar.org/bitstream/handle/10947/3404/CGIAR%20IA%20REPORT%20%28Revised%20%26%20CB%20approved%2010%20Oct%202014%29.pdf?sequence=1>). The LEA arrangement subject to the deviation concerned granting semi-exclusive access to machinery and equipment prototype designs for a period of two years and an exclusive right to commercialize improved machinery and equipment for a period of one year. During this time, the prototype designs and improvements would not be available for research purposes as required pursuant to the research exemption. The FC IP Group agreed with the Consortium's conclusion that the request for deviation was compelling taking into account the overall objective to make improved and useful machinery and equipment available affordably to low-income farmers; the ease with which the designs could be copied and appropriated for commercial use if made available pursuant to the research exemption; and the public availability of the prototype and improved designs for research after two years.

7.3.3 Patent applications

As per Section 5.5.2 above, one Center (IRRI) reported the filing of five Patent Cooperation Treaty (PCT) applications and one US utility patent. Five of the six provisional patent applications that IRRI reported in 2014 have now been filed under the PCT system, which means that IRRI (together with its partners) has an additional 18 months (from the PCT filing date) to decide whether and in what countries it wants to apply for a utility patent. The US utility patent application also follows from one of the six provisional patent applications that were reported in 2014. The FC IP Group agrees with the Consortium Legal Team that the justifications provided by IRRI are deemed acceptable for the PCT filing stage. However, the FC IP Group recommends that the Center provide justifications that more clearly explain the connection to the CGIAR Vision in subsequent patent applications. Stronger justifications, including dissemination and market plans, will allow donors to better understand what the Center's patent protection strategy is and how such strategy furthers the CGIAR Vision.

7.4 Positive highlights

7.4.1 Reporting

The FC IP Group supports the CGIAR Consortium's efforts to develop a significantly streamlined reporting template and processes for the next reporting cycle in 2015 based on lessons learned from previous reporting cycles, feedback from Centers and the FC IP Group. The FC IP Group anticipates that the refreshed IA reporting will elicit more targeted responses from the Centers and eliminate redundancies with CRP reporting.

7.4.2 Open access

As indicated in Section 5.2 above, several Centers reported having developed or updated institutional policies consistent with the recent CGIAR Open Access and Data Management Policy. The FC IP Group is pleased to see the extent of policy development occurring in regards to open access and data management and looks forward to the Centers' open access policies being made publicly available once approved.

7.4.3 Trademarks

As indicated in Section 5.5.3 above, several Centers reported applying for and/or receiving trademark registration for their names and logos and their products. In addition to the product-related examples highlighted in Box 7 in Section 5.5.3 above, one Center (IWMI) reported a trademark application in progress for 'FORTIFER', a product generated from the pelletization of fecal sludge-based fertilizers for agricultural use. Centers cited trademarks as an effective means of promoting institutional recognition; connecting a Center to its projects, technologies and material; and measuring the impact of a Center, its programs and products. The FC IP Group supports the Centers' effective use of trademarks in furtherance of the CGIAR Vision.

7.4.4 Limited Exclusivity Agreements (LEAs)

In addition to the LEA highlighted in Box 5 of Section 5.4.1.1 above, one Center (CIMMYT) reported entering into a memorandum of agreement with 10 additional partners joining the CIMMYT-led International Maize Improvement Consortium for Asia (IMIC-Asia). The consortium structure effectively strengthens its 'weakest link' by establishing the liaison with Indian seed companies to ensure that its new elite germplasm will actually reach farmers. CIMMYT confirmed that 1) any interested party can join the consortium by

paying a membership fee and 2) all members have semi-exclusive access to the germplasm, while CIMMYT retains the right to make all breeding lines available to any public organization for research purposes and for food emergencies in furtherance of the CGIAR Vision. The FC IP Group supports the use of consortia arrangements of this nature, which leverage existing value chains to ensure that new elite germplasm will actually reach CGIAR target farmers.

7.4.5 Community of Practice

The CGIAR Consortium has been extremely effective in strengthening the IP Community of Practice of all Centers, providing effective continuing education and discussion on critical areas on many matters of intellectual asset management. During the 2014 CLIPnet meeting organized by the Consortium, the FC IP Group led a virtual session on the CGIAR IA Principles titled "Moving Beyond Compliance." These types of interactions among the Centers and between the Centers and the FC IP Group are key opportunities to not only discuss the requirements under the CGIAR IA Principles, but also emphasize the flexibilities and opportunities the CGIAR IA Principles afford in support of the CGIAR Vision. According to the CGIAR Consortium, the FC IP Group's participation also humanized the FC IP Group members, who introduced themselves and answered many questions from the Center IP focal points. In consultation with the FC IP Group, the

CGIAR Consortium also developed a Q&A document to answer the Centers' questions on compliance with the CGIAR IA Principles and Implementation Guidelines. The CGIAR Consortium and FC IP Group will continue to fine-tune this Q&A document to incorporate lessons learned from the just completed third reporting cycle and the overall evolution of the CGIAR IA Principles.

Also, the CGIAR Consortium and FC IP Group have observed that certain Centers have adopted a conservative interpretation of the CGIAR IA Principles. It is important to emphasize that the CGIAR IA Principles seek to facilitate partnerships and scale up activities, including engagement with the private sector, in furtherance of the CGIAR Vision. The FC IP Group recommends that the CGIAR Consortium, in consultation with the FC IP Group, continue working with the Centers on clarifying interpretation issues.

7.5 Other developments

7.5.1 Treaty

Further to Section 5.6 above, the FC IP Group and the Consortium Legal Team discussed Center practices in relation to the Treaty and, in particular, Center reporting on germplasm transfers and the use of the SMTA, after some concerns had been raised by donors in this regard. The Consortium Legal Team was well aware of these matters and displayed several actions that had been initiated in close collaboration with Centers in order to improve reporting to the Governing Body and to secure compliance with Centers' transfer and

reporting obligations pursuant to the Treaty. The FC IP Group is pleased that Centers are working closely with the Treaty Secretariat to streamline their reporting and supports other initiatives in this regard, such as the internal survey undertaken in 2014 to collect information on Centers' use of the SMTA when transferring PGRFA under Development in anticipation of a review of Center practices by the Treaty Secretariat as per Section 5.6.1 above.

7.5.2 Nagoya Protocol

In October 2014, the Nagoya Protocol entered into force. Further to Section 5.6.3 above, the FC IP Group is pleased to see that the CGIAR Consortium, in close collaboration with Centers and others (e.g., ACIPA), is undertaking several activities (e.g., CLIPnet webinars; draft checklist on compliance with Nagoya Protocol) to build awareness on how the Nagoya Protocol may affect Center activities and its interrelations with the Treaty. The FC IP Group recommends that Centers and the CGIAR Consortium continue to, where necessary, scale up these activities in light of national implementation of the Nagoya Protocol and ongoing developments regarding the review of the Multilateral System (MLS) of the Treaty.

7.5.3 Farmers' rights

As per Section 5.7 above, several Centers highlighted examples in their reports of how they have aimed to strengthen and promote farmers' rights. In line with donor comments during the Fund Council's twelfth meeting last year, the FC IP Group and the Consortium legal team discussed the desirability, in the longer term, of developing a more systematic vision of how Centers could proactively promote farmers' rights. The section on farmers' rights in the Implementation Guidelines was revisited as well as GFAR's study on the same. For now, the FC IP Group recommends Centers to continue to monitor best practices and experiences on the matter, taking into account relevant country contexts in light of variations in national legislations.

7.5.4 IA management in CRPs

The FC IP Group is happy to see the initiatives highlighted by Centers on intellectual asset management within CRPs, as per Section 5.8 above and consistent with the FC IP Group's recommendation in the second review of 2013. The FC IP Group is pleased to note the working

group, referred to in Section 4.6 above, is developing guidance to ensure that intellectual asset management is adequately addressed in the CRP proposals to be submitted pursuant to the CRP second call.

7.6 Conclusion and recommendations

In this third review, the FC IP Group is satisfied with the Centers' consistent progress in terms of compliance, reporting, IP capacity and adoption of best practices. Also, the FC IP Group commends the CGIAR Consortium's various efforts to guide and monitor compliance with and implementation of the CGIAR IA Principles, to continue building a community of practice and to communicate effectively with the FC IP Group.

The FC IP Group has the following recommendations:

- a) that Centers develop and report on their market and dissemination strategy plans in line with the CGIAR Vision as part of the 'justifications' for any patent application and, where possible, for any provisional or PCT patent application in the future;
- b) that Centers consider future approaches for tracking the impact of their LEAs and RUAs on the target beneficiaries;
- c) that Centers share their best practices and effective IP strategies and models with the CGIAR Consortium and other Centers and leverage these resources when drafting agreements and negotiating terms;
- d) that the CGIAR Consortium, in consultation with the FC IP Group, continue to clarify issues related to interpretation of the CGIAR IA Principles; and
- e) that Centers and the CGIAR Consortium continue to build awareness regarding compliance with the Nagoya Protocol and the Treaty's MLS.

IA	Intellectual Assets
ACIPA	Australian Center for Intellectual Property in Agriculture
Bioversity	Bioversity International
Centers	Members of the CGIAR Consortium
CGIAR Consortium	Consortium of International Agricultural Research Centers
CGIAR IA Principles	CGIAR Principles on the Management of Intellectual Assets
CIAT	International Center for Tropical Agriculture
CIFOR	Center for International Forestry Research
CIMMYT	International Maize and Wheat Improvement Center
CIP	International Potato Center
CLIPnet	CGIAR Legal and IP Network
CRP(s)	CGIAR Research Program(s)
FC IP Group	Fund Council Intellectual Property Group
GMO(s)	genetically modified organism(s)
ICARDA	International Center for Agricultural Research in Dry Areas
ICRAF	World Agroforestry Center
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
IP	Intellectual Property
IRRI	International Rice Research Institute
IWMI	International Water Management Institute
LEA(s)	Limited Exclusivity Agreement(s)

GLOSSARY

	MLS	Multilateral System of Access and Benefit Sharing of the International Treaty on Plant Genetic Resources for Food and Agriculture
Nagoya Protocol		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
	PCT	Patent Cooperation Treaty
	PGRFA	Plant Genetic Resources for Food and Agriculture means “any genetic material of plant origin of actual or potential value for food and agriculture” as defined in Article 2 of the SMTA
PGRFA under Development		PGRFA under Development means “material derived from the Material, and hence distinct from it, that is not yet ready for commercialization and which the developer intends to further develop or to transfer to another person or entity for further development” as defined in Article 2 of the SMTA
	PVP	plant variety protection
	Q&A	question and answer
	RUA(s)	Restricted Use Agreement(s)
	SMTA	Standard Material Transfer Agreement of the International Treaty on Plant Genetic Resources for Food and Agriculture
	Treaty	International Treaty on Plant Genetic Resources for Food and Agriculture
WG-EFMLS		Working Group to Enhance the Functioning of the Treaty’s MLS

GLOSSARY

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