



Review of CGIAR Intellectual Assets Principles

IEA Review

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Independent
Evaluation
Arrangement

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Abbreviations

CLIPnet	CGIAR Legal/IP Network
GMO	Genetically Modified Organisms
IA Principles	CGIAR Principles on the Management of Intellectual Assets
IAS	Intellectual Assets
IEA	Independent Evaluation Arrangement
IP	Intellectual Property
IPG	international public goods
IPRs	Intellectual Property Rights
LEA	Limited Exclusivity Agreement
LEAs	Limited Exclusivity Agreements
OA Policy	CGIAR Open Access and Data Management policy
PCT	Patent Cooperation Treaty
PVP	Plant Variety Protection
Q&A	Questions & Answers
RUAs	Restricted Use Agreements
SCIP	System Council Intellectual Property

Executive Summary

The CGIAR Principles on the Management of Intellectual Assets (IA Principles)¹ are one of the System-wide policies applicable to the 15 CGIAR Research Centers that operate as independent research organizations in implementing CGIAR research activities with their partners. The main purpose of the IA Principles is to provide a common position and framework for governing the production, acquisition, management and dissemination of intellectual assets (IAs) and the use of Intellectual Property Rights (IPRs) with an aim of maximizing global accessibility of CGIAR's IAs in order to achieve the broadest possible impact on target beneficiaries. The IA Principles apply to "all results or products of research and development activities of any nature whatsoever." The IA Principles were approved in March 2012 and they stipulate that they shall be reviewed every two years "in light of experiences gained". In 2016 the Independent Evaluation Arrangement (IEA) -in charge of system-level evaluations in CGIAR- was requested to undertake this second biennial review.

The IA Principles sought a balance between the requirement for making research results broadly accessible as international public goods (Principle 1) and the possibility of entering into partnerships under conditions of exclusivity and the restricted use of Intellectual Property (Principles 2, 5 and 6). The review team concludes from the interviews held and the documents considered that the new framework set out by the IA Principles is a necessary, legitimate and appropriate adaptation to changing circumstances, where partnerships, including with private companies, are necessary to achieve the greatest impact of new technologies, rather than a departure from CGIAR's fundamental vision.

A fundamental underpinning of the IA Principles is that innovative management of IAs may be needed in certain cases to obtain access to third parties' intellectual property, selectively protect research outputs or incentivize partnerships, including with private sector partners, to amplify the impact of CGIAR programs. The Principles were designed to provide IA management tools that would address these objectives and, over time, increase the effectiveness of Centers in achieving the CGIAR mission. At this early stage of implementation of the IA the Principles, the review team found that the System and the Centers have made significant progress in developing policies and capacity and in building awareness in IA management. However, the review team also found that, in some cases, the Principles are being incorrectly interpreted as being overly restrictive with regard to the extent to which protection of IAs is permitted and the nature of exclusivity arrangements that were permitted.

The review team found that the implementation of the IA Principles has proceeded systematically with a number of positive signs, including increased legal staffing at each Center, development of a review and oversight process, a robust reporting process and launching of the CGIAR Legal/IP Network (CLIPnet) community of practice. However, the review team observed some inadequacy of resources and capacity.

The implementation of the IA Principles has had a clear and positive impact on IA management at the Center level. Staff capacity, especially legal, to deal with IA issues has been strengthened, and the Principles and their implementation Guidelines have increased awareness and facilitated decisions on

¹<https://library.cgiar.org/bitstream/handle/10947/4486/CGIAR%20IA%20Principles.pdf?sequence=1>

IA issues at the management level. Despite the importance attributed by donors and the CGIAR system to the subject of the IA Principles, sufficient funding has not been provided to undertake the required tasks and, in particular, to hire personnel with the competence to address the more complex issues.

The review team concludes that the IA Principles have enhanced IA-related decision-making and, in particular, allowed Centers' management and the System Office to more efficiently deal with IA-related issues. The team sees this as a major achievement to-date of the approval and implementation of the IA Principles. The Principles have also contributed to preserve the reputation of CGIAR as a System focused in delivering international public goods (IPGs), with a realistic, prudent and transparent policy to exploit the opportunities offered by various types of agreements that may enhance Centers' research capacity and contribution to CGIAR's outcomes.

While the review team recognizes that the Principles are appropriate and have the potential to amplify the impact of the CGIAR System, the Team offers four recommendations that could improve the impact of Principles.

Recommendation 1. In order to clarify the scope and intent of the IA Principles, the System Management Board should oversee revision of the Guidelines to ensure (a) a coherent application of the IA Principles across all CGIAR technology sectors, including forests, microorganisms, livestock, fish and information technology, and (b) more specificity regarding emergency exemptions.

Recommendation 2. The System Management Board should oversee the development and deployment of a communications program to create a more uniform understanding across the CGIAR System regarding the opportunities to enter into partnerships that may add value to the Centers' activities as well as the prudent use of IPRs when needed to enhance impact.

Recommendation 3. To determine the portfolio of existing IAs in the Centers and to better understand their range and value, Centers should be encouraged and supported by the System Organization to undertake an IA audit and develop strategies to ensure their effective management and dissemination of IA. This applies particularly to those Centers that generate non-traditional IA where CGIARs' awareness of the IA value may be limited.

Recommendation 4. System Organization should develop an interdisciplinary (not just legal) IA Management function at the System-level, designed to support IA management across all Centers with a minimum commitment of 2 full-time professional staff with expertise in contract and intellectual property law and in business and technology management to provide services to Centers as well as advice and training through Q&A or other methods (e.g. workshops). This would be most readily achieved through expansion of the activities and designated responsibility in the System Management Office.

1. Introduction

1.1. Purpose and focus of the review

The CGIAR Principles on the Management of Intellectual Assets (IA Principles)² are one of the System-level policies applicable to the 15 CGIAR Research Centers (hereafter Centers) that operate as independent research organizations in implementing CGIAR research activities with their partners. The main purpose of the IA Principles is to provide a common position and framework for governing the production, acquisition, management and dissemination of intellectual assets (IAs) and use of Intellectual Property Rights (IPRs) with an aim of achieving broadest possible impact on target beneficiaries. The IA Principles apply to “all results or products of research and development activities of any nature whatsoever.” The IA Principles are an umbrella policy for CGIAR Open Access and Data Management policy³ (hereafter OA policy) that, in particular, expands on Article 6.1⁴ of the IA Principles to emphasize prompt and broad dissemination of CGIAR’s research results.

The IA Principles are complemented by the Implementation Guidelines⁵ for the IA Principles, approved in 2013, that address each section of the Principles to provide further elaboration as well as illustrations and examples. In addition, the Questions & Answers (Q&A)⁶ on Reporting and Implementation of the Principles operate as a fluid matrix of information to address specific issues raised by Center IP Focal Points. Collectively, this body of information is available to inform the CGIAR System of the IA Principles and guidance in their implementation.

In practice, the IA Principles are implemented at the Center level with System-level oversight. The IA Principles have been incorporated into Center IA or IP policies which provide guidance to Center legal teams with responsibilities for IA management. Within the Principles are provisions for Centers to enter into both Limited Exclusivity Agreements (LEAs) and Restricted Use Agreements (RUAs) within certain boundaries. For example, LEAs must include exemption clauses for non-commercial research and for food security emergencies in all countries. Prior approval from the System Organization to enter into an LEA is generally not required unless there are deviations from the allowed terms. Centers are required to provide annual IA reports, with both confidential and non-confidential sections, to the System Organization that include an assurance of compliance, a description of Center IA management capacity, and a report of any LEAs, RUAs or Intellectual Property (IP) applications. Center reports are reviewed by the System Council Intellectual Property⁷ (SCIP) group and System Organization legal team, and used to develop an annual IA report submitted to the System Council. The reporting

² Approved in 2012

³ <https://cgspace.cgiar.org/bitstream/handle/10947/4488/Open%20Access%20Data%20Management%20Policy.pdf?sequence=1>

⁴ Compliance with the Open Access and Data Management policy is scheduled for 2018

⁵ <http://library.cgiar.org/bitstream/handle/10947/4487/Implementation%20Guidelines%20for%20the%20CGIAR%20IA%20Principles.pdf?sequence=1>

⁶ Q&A does not require approval at System level.

⁷ Known as the Fund Council Intellectual Property group prior to CGIAR governance reform in 2016.

requirements provide an opportunity for System level oversight and for a level of transparency through consolidated reporting at the System level.

The IA Principles stipulate that they shall be reviewed every two years “in light of experiences gained”. In 2014, the (then) CGIAR Consortium, in consultation with the Centers, and the (then) Fund Council Intellectual Property group conducted a brief appraisal of progress in implementing the IA Principles during their first two years of operation. In 2016 the Independent Evaluation Arrangement (IEA) -in charge of system-level evaluations in CGIAR- was requested to undertake the second biennial review. This is laid out in the 2015 CGIAR Intellectual Assets Report⁸.

While recognizing that assessing whether the IA Principles are achieving their intended purpose is a challenging task given the relatively limited evidence base available in the less than 5 years since the policy was approved, the Terms of Reference to this review identified as the purpose of the review ‘to assess whether the IA Principles and their implementation is advancing the achievement of their intended purpose to maximize the global accessibility and impact of CGIAR research’.⁹

The review was designed to assess the IA Principles (including the Guidelines adopted for their implementation) in a comprehensive manner regarding appropriateness, effectiveness, efficiency and governance of the Principles, including:

- Principles stating general intent (1-5);
- Principles implying best practice management or compliance (6-7); and
- Principles concerning process (8-12)

The review, as defined by the IEA, aimed at presenting recommendations concerning ‘the IA Principles and their implementation for enhancing the effectiveness of the policy towards the long-term objective and for furthering CGIAR vision’. The review also assessed any reputational issues that may arise from the manner by which CGIAR manages and governs its IA, including through the Principles.

1.2. Methodology

The review team prepared an inception plan that included a matrix of evaluation questions to respond to each of the four main topics with sources of evidence¹⁰. The review team relied primarily on document review and interviews, with the aim of carrying out an evidence-based analysis on which a set of recommendations could be formulated.

The documents reviewed included:

- IA Principles, Implementation Guidelines and Q&A on Reporting and Implementation
- IA annual reports (non-confidential sections) to the FC/SC

⁸<http://library.cgiar.org/bitstream/handle/10947/4372/2015%20CGIAR%20IA%20Report.pdf?sequence=4>

⁹ http://iea.cgiar.org/wp-content/uploads/2017/02/ToRs_IA-Review_FINAL.pdf

¹⁰ <http://iea.cgiar.org/wp-content/uploads/2017/02/IA-Inception-Plan.pdf>

- Internal IA Principles biennial review undertaken in 2014
- Minutes of Fund Council meetings concerning reporting on policy implementation
- Other CGIAR policy documents that have relevance to the review, policy on Open Access and Data Management, in particular
- Historic or background documents preceding the policy, including “Briefing Paper on Intellectual Property, 2011”
- CLIPnet (Center IP focal points and legal staff) meeting records
- Relevant documents concerning the process and issues prior to approval of the IA Principles (e.g. documents of the Genetic Resource Policy Committee and Central Advisory Service – Intellectual Policy)

In addition, interviews were conducted and questionnaires sent to several stakeholder groups, some of which were covered comprehensively and others through sampling. Two questionnaires were used to collect information in a systematic manner from different groups of informants¹¹. The groups surveyed and/or interviewed included:

- Center IP focal points and legal staff
- Center Senior Management
- Partners knowledgeable about or dealing with IA with Centers; within them private sector partners as important sub-group
- All members of the SC Intellectual Property group (SCIP group)
- Sample of donors
- Legal team at System Management Office

The interview/survey information was somewhat restricted by the fact that stakeholders outside CGIAR were not well versed on IA issues in general, or the IA principles more specifically. Furthermore, the partner response rate was limited.

¹¹ See Annex 2.

2. Appropriateness of the IA Principles

2.1. Introduction

Historically, CGIAR research results have been treated as international public goods (IPGs), that is, they have been released for free use without geographical or other limitations. CGIAR has partnered primarily with the public sector for delivery of its results or through the public release of information and research results. This strategy has been consistent with the historical treatment of agricultural research results in general, and the positive impacts of CGIAR research have been documented¹². Over the last 25 years much has changed in the ways that agricultural research is translated to applications, with commercial channels becoming much more prevalent and providing new modalities and incentives to amplify the impact of research results. This changing landscape in the dissemination and application of agricultural research results may justify, or indeed require seeking IA protection, including patents and plant variety protection (PVP) in order to enter into partnerships with parties that require a certain level of exclusivity to incentivize the commercial distribution of the outputs of a new technology or research results. In addition, there is rapid development of agricultural technologies to which CGIAR Centers need access in the furtherance of their own research and these are often under the control of third parties, such as public research institutions or the private sector.

This changing environment explains the provisions of the IA Principles regarding LEAs, RUAs and IPRs. The IA Principles recognized the need for the Centers to have some flexibility to enter into partnerships, seek intellectual property protection in some circumstances, get access to third parties' protected technologies, when necessary to perform their mission, even if in so doing, the global accessibility of the resulting products/services may be limited for some purposes, duration or geographical areas. The IA Principles identified a path towards balancing the historical concept of research results being treated as IPGs with the need to expand impact of the CGIAR system through a range of partnerships and the possibility, in some cases, of filing patents or PVPs and entering into LEAs or RUAs. At the time of adoption of the IA Principles, they were considered to reflect a compromise that "balances trust and Center autonomy with accountability and transparency"¹³. Particular concerns were expressed at that time regarding transparency in relation to agreements involving limited exclusivity or the use of third parties' IAs. The Centers were requested to use 'their best efforts' to apply a policy of transparency to be limited only 'by the need to protect legitimate research partner interests in proprietary technology'¹⁴.

Thus, the adoption of the IA Principles represented a significant step to adapt the historical mode of disseminating CGIAR Center research results, products and services to the changing circumstances in agricultural research. Our assessment as to whether this adaptation has been appropriate in the context of the CGIAR mission relied on a survey of documents, survey responses and interviews.

¹² For example, see Renkow, M. and Byerlee, D. 2010. The impacts of CGIAR research: a review of recent evidence. *Food Policy* 35: 391–402.

¹³ 7th Fund Council Meeting Summary, 2012.

¹⁴ Decision of the Fund Council, 2012

2.2. Assessment

2.2.1 General considerations

CGIAR had recognized, already prior to the 2008 reform, the importance of a System-wide Policy for IA management. Analysis of documents on the development of the Policy available to the review team revealed that the development of the IA Principles reconciled a diversity of views among different groups of stakeholders. The process for negotiating a policy acceptable to all stakeholders was lengthy, taking several years, reflecting this tension. There was, in particular, a certain tension between those willing to emphasize the role of CGIAR as a producer of IPGs in order to further its vision ('A world free of poverty, hunger and environmental degradation')¹⁵ and those prepared to accept restrictions to the global accessibility of IA produced by the Centers, through the acquisition and enforcement of IPRs and exclusive licensing arrangements, in order to enhance impacts to intended beneficiaries through product development, scaling up and commercialization by third parties, including the private sector. Different levels of concerns regarding transparency and the reputational impact of possible changes in CGIAR's policies of open and unrestricted dissemination of Center's outputs were also expressed.

The interviews held and the documents considered for this review, indicate that the new framework set out by the IA Principles has been generally regarded as a necessary and legitimate adaptation to changing circumstances, rather than a departure from CGIAR's fundamental vision. In the team's view, the substantive requirements spelled out in the IA Principles ensure a prudent identification of the situations where limitations to the broad dissemination of research outputs may be justified (all cases are included in the Center annual reports). In the case of a LEA that deviates from the Principles (for example with respect to a research or food emergency reservation of rights) advance justification and approval from the System Organization (and delegated to the System Management Office) is required. This requirement further ensures compliance with the rules and of system-wide coherence.

The review team found that the IA Principles have sought and reached an acceptable compromise between the different approaches, and that they provided a careful balance between the requirement for broad accessibility to IPGs (Principle 1) and the possibility of entering into partnerships under conditions of exclusivity and the restricted use of IPR (Principles 2, 5 and 6).

However, the review team observed that there still remains a spread of views and some tension between those who would like to see all results from public funding as IPGs, and those who put more emphasis on the end results and impact among CGIAR beneficiaries, even if that requires more liberal use of exclusivity than what is currently done, as may be necessary for engaging in delivery-oriented partnerships. The review team suggests that, particularly as the CGIAR's Strategy and Results Frameworks puts increased emphasis on contribution to development outcomes, the CGIAR research community would benefit from deliberations across the System on CGIAR's evolving position regarding whether and how to rebalance the objective of generating IPGs in the face of the necessity to contribute to development outcomes.

¹⁵ CGIAR Strategy and Results Framework 2016-2030

Feedback from partners, while limited, revealed general satisfaction with CGIAR's reputation regarding IA management and improvement at Center level. Some individual responses highlighted the need for more liberal use of exclusivity, and better harmonization of Center practices as well as rules of engagement in partnerships.

2.2.2 *Scope of the Principles*

Through its review of the IA Principles, and the feedback obtained from interviews and surveys, the review team found the scope of the IA Principles appropriate and that a reasonable interpretation of the Principles allows to adequately address the different types of CGIAR IAs. However, a number of Center IP Focal Points had questions regarding the coverage of the Principles, particularly that they seemed to be directed towards plant genetic resources and were less relevant to other types of IAs including animals, vaccines, policy documents, information technology and advanced genetic technologies such as genetically modified organisms (GMO). These comments raised the concern that the Principles are interpreted as being inadequate in addressing CGIAR's broad mandate across many technology sectors and types of data and results. One example was in the area of animal vaccines potentially licensed under an LEA and whether the requirement for an exemption in the case of a "Food Security Emergency" should also be extended to include an exemption for an "Animal Health Emergency". The Principles do not directly address the scope of the "Food Security Emergency" and how this would apply to non-food technologies and this contributes to lack of clarity in certain research domains that fall under the scope of CGIAR. However, the team found no examples of an insurmountable obstacle that had arisen, and does not believe that this issue warrants a revision of the Principles. Rather, the Review Team recommends that this be addressed in the Implementation Guidelines or Q&A. This requires investment of time to fully understand the range of types of IAs involved and to specifically anticipate situations where the Principles will need to be interpreted and guidance expanded to provide an appropriate framework (see Recommendation 1).

Some informants raised an issue of scope of the IA Principles in relation to the OA policy, which falls under the general purview of the IA Principles¹⁶. Indeed, the provisions of the OA policy of rapid dissemination of results could directly impact the ability to protect IPRs under the IA Principles. This topic is briefly addressed in the IA Implementation Guidelines but the relationships of the policies and their governance would benefit from further clarification¹⁷.

Another comment addressed the lack of sufficient guidance under the Principles in relation to traditional knowledge (particularly knowledge not related to plant genetic resources), the use of which by the Centers in conducting research may trigger benefit sharing obligations under national and international law. This issue is very important for the CGIAR System to address but it goes beyond the IA Principles and is thus outside of the scope of this review. The review team also understands that the issues of traditional knowledge and access and benefit sharing are being addressed through separate initiatives within the CGIAR system and strongly encourages a prompt completion of these efforts.

¹⁶ The scope of the IA Principles includes 'knowledge, publications and other information products, databases' which are also covered by the Open Access Policy.

¹⁷ The OA policy is also under review by the IEA.

2.3. Conclusions and Recommendations

The review team concludes that the IA Principles are appropriate in terms of striking the correct balance between treating research results as public goods and having the option to protect IAs and/or treat them as private goods for transfer to private or public partners under limited exclusivity agreements. The IA Principles reflect a recognition within CGIAR that - to enhance the CGIAR impact through partnerships may require the selective acquisition of IPRs and the use of LEAs and RUAs.

The review team further concludes that the Principles are achieving the intended objectives and are not in need of revision today. While there is variation of how the scope is understood, this matter does not require changes in the Principles.

Recommendation 1. In order to clarify the scope and intent of the IA Principles, the System Management Board should oversee the revision of the Guidelines to ensure (a) a coherent application of the IA Principles across all CGIAR technology sectors, including forests, microorganisms, livestock, fish, and information technology, and (b) specificity regarding emergency exemptions.

3. Effectiveness of the IA Principles

3.1. Introduction

A fundamental underpinning of the IA Principles is that innovative management of IAs may be needed in certain cases to obtain access to third parties' IAs, selectively protect research outputs or incentivize partnerships, particularly with private sector partners, to amplify the impact of CGIAR programs. The Principles were designed to provide IA management tools that would address these objectives and, over time, to increase the effectiveness of Centers in achieving the CGIAR mission.

However, partnerships, in particular with the private sector, are quite complex, with IA issues being only one of many dimensions of the relationship that must be navigated. In addition, partnerships are not an end in itself, but a necessity to achieve results for the fulfillment of the CGIAR vision that may not be otherwise obtained or, which may be more efficiently obtained, with the intervention of an adequately chosen partner. Partnerships may require LEAs, RUAs or the filing of IPRs. The rate of use of these instruments will be dependent on the particular Centers' demands to address the needs of CGIAR target beneficiaries. As a consequence, the use of these tools will evolve over time, in particular, as the System becomes experienced in navigating and negotiating partnerships and other agreements in all of their dimensions. The effectiveness of the IA Principles is a function of the Principles themselves and their implementation. In the short time since adoption of the Principles, the Review Team can assess their effectiveness in terms of building policies, awareness and capacity in addressing IA issues. At this point in the development of practices to implement the Principles, the right question is whether the System and the Centers have begun the process of developing policies and capacity and building awareness in IA management. This question is addressed in the following sections. In the longer term the impact of any IA protection and agreements made within the stipulation of the Principles for broadening technology dissemination and reach should be monitored to determine the effectiveness of the policy.

The review team relied on survey and interview results from Center IP focal points, Center leadership, external partners and donors.

3.2. Assessment

3.2.1 General Considerations

The IA Principles have had an important impact in increasing the awareness of IAs across the CGIAR system and increasing the capacity at each center to work with IAs in the context of partnership development. For example, the Principles have been directly incorporated or referenced in the IA policies of most of the centers and these policies provide a blueprint for addressing IAs. A few Centers (CIMMYT, IFPRI, IRRI and CIAT) have IP policies that were either adopted before the IA Principles or that do not explicitly reference the Principles. However, these Center policies are nevertheless consistent with the Principles.

In addition to harmonization of IA policies across all of CGIAR Centers, a very common response from both Center IP Focal Points and Center Senior Management was that the Principles have created a

better awareness of the potential use of IA-based strategies to achieve broader impact. This increased awareness has been noted at the legal as well as scientist and management levels.

3.2.2 *Clarity and Interpretation of the Principles*

Survey replies and interviews generally indicated that the Principles provide clear and concise guidance for IA management across Centers and the CGIAR system and that they were formulated in unambiguous terms. The review team agrees with this view, however, there were several comments worth noting. The issue about how the IA Principles are interpreted for their scope has already been discussed above.

A number of responses from Centers suggested that the Principles are being incorrectly interpreted as being overly restrictive. For example, one Center reported that the Principles did not allow the protection and licensing of crop varieties and another expressed uncertainty regarding the extent to which fees could be charged. However, the Principles clearly state that protection and licensing of plant varieties is allowed in order “to enhance the scale or scope of impact” and that “Centers may charge reasonable financial fees, beyond actual costs”. A question was also raised about ownership, which the review team finds is well addressed in the Implementation Guidelines; the IA Principles made the deliberate choice of leaving flexibility to allow Centers the leeway to negotiate the issue of ownership with potential partners. These comments point to some gap in understanding the intent, substance and flexibility of the Principles among persons dealing with IA at some of the Centers, which has implications on the effectiveness of the Principles.

A very different interpretation of the Principles was also presented: “the IA Principles is an ambiguous policy document about technology transfer: it is not clear whether IP protection and commercial links are encouraged or discouraged. They are not intended to help Centres, they are intended to allow the IP activities of Centres to be monitored and controlled”. The reviewers have some concern about this statement, as well as those stated above, as they suggest that there is not a clear message about the intended use of the Principles. Clearly the IA Principles allow for IP protection and commercial links but there seems to persist a view, at least in some parts of the CGIAR system that such agreements are not permitted or are discouraged. These findings relate more to the implementation of the Principles rather than to the Principles themselves (or the Guidelines). The reviewers believe that the variance in the perception concerning restrictiveness of Principles should be seriously addressed through consistent messaging to confirm that partnerships, including with the private sector, may require some degree of exclusivity concerning IA, and that is an acceptable (and, under certain circumstances, desirable) option under the Principles, when needed to achieve the CGIAR objectives.

3.2.3 *Flexibility of the Principles*

The review team found agreement in most Centers that the IA Principles are sufficiently flexible to pursue the respective Centers’ goals. However, several survey respondents considered the Principles were rather inflexible. The Review Team interprets that this may result from the historical context of the CGIAR approach to produce only IPGs and, again, a need for better messaging across staff involved in IA to express the potential use of IA tools and agreements that may grant partners some limited exclusive rights. This observation is also related to how the IA Principles are interpreted (see previous section). It indicates that there is a need for better communications across the system to appropriately

express the System recognition of the possibility and value of strategically using IAs in partnerships when required to further the impact of CGIAR research programs.

Some views were expressed suggesting that the flexibility offered by the IA Principles should be expanded, for instance, by removing the prior approval required under section 6.2.2¹⁸. According to one illustrative opinion:

‘in their current state, the Principles create additional, unnecessary administrative burdens rather than enable efficient IA management... To be most efficient, the Principles should allow for appropriate in-house management of IA with particular characteristics, without the need to escalate every case. It would make sense to submit a request for deviation the Research and/or Food Emergency Exemption to the IP Fund Council when a Limited Exclusivity Agreement (“LEA”) refers to machinery, or to conventional breeding of germplasm, for example. It does not make sense, however, to request a deviation for new technologies (such as GMOs, because of their stewardship requirements) that will always require a deviation to enable parties to enter an agreement’.

Lack of flexibility was also mentioned in respect to the filing of PVP which, in the view of one informant, has become increasingly important to enhance the dissemination of research results. Breeding companies in some target countries would often be unwilling to work with or invest in a plant variety which was unprotected and thus also available for use and commercialization by other public or private entities. The need for more room to engage in defensive acquisition of IPRs by Centers was also mentioned as an important IA management tool that was not readily available for implementation at the Center level. These comments represent some frustration with System level oversight and a desire for greater Center autonomy to assess the local IA landscape and respond accordingly and independently.

In contrast to these comments and concerns, the review team did not find the Principles overly restrictive and that they do allow filing for PVPs and for local assessment of the IA landscapes. However, the flexibility allowed by the IAs Principles has not been used to the fullest possible extent and some Centers perceive that the Principles are more restrictive than they actually are. For instance, the 2014 Fund Council IP Group Independent Section Report noted that ‘the CGIAR Consortium and Fund Council IP group have observed that certain Centers have adopted a conservative interpretation of the CGIAR IA Principles and expressed the view that the use of IPRs is discouraged’. The review team found that through the work done by the System Management Office, as evidenced, by the large number of Q&A and the clarifications provided through them, significant progress has been made since the 2014 IP report in addressing interpretation concerning what the IA Principles permit, but continued efforts in this regard are needed.

¹⁸ A Center may, in certain cases, deviate from the Research [allowing unlimited use for non-commercial research conducted by public sector organizations] and Emergency Exemptions [allowing unlimited use in the event of a national or regional Food Security Emergency] [...], provided that this deviation is first approved by the System Organization.

Although the Centers' desire to operate as flexibly as possible is understandable, the review team emphasizes that the IA Principles were developed as a coherent policy at the system level, and there must be a delicate balance between local Center autonomy and System level oversight. This objective of maintaining a coherent System level policy, which most respondents agree with, would not be achieved if individual Centers had full autonomy to design their own policies and conduct their own in-house IA management. The review team concludes that, given the objectives of the Principles and the reputational risks involved in managing IAs and entering into agreements with third parties, a sound policy maintaining oversight at the system level is necessary. On the basis of the evidence the Review Team gathered, this has not created any major roadblock to Centers' activities, and the Team concludes that there is currently an appropriate balance between Center-level flexibility and system-level oversight.

3.2.4 Use of Limited Exclusivity Arrangements

While it is too early (five years since adoption) to assess whether the IA Principles are effective in serving to increase dissemination of research results, the review team assessed whether the IA Principles and their flexibility are likely to support the use of a diversity of tools, including LEAs and RUAs (with exemptions for non-commercial research and food security emergencies). It is clear that the adoption of the IA Principles did not unleash an avalanche of LEAs. The period since the adoption of the Principles is too short to discern a clear trend but the use of LEAs and RUAs do not appear to increase over time (see Table 1).

Table 1: Use of IA protection in CGIAR - 2012-2016

	2012	2013	2014	2015	2016
LEAs	7	7	4	0	4
RUAs	8	3	1	0	0
Patent applications	0	6	6	4	8
Plant Variety Protection	0	3	0	0	0

Source: IA annual report

While a decline in LEAs and RUAs appears to be evident after 2012, one reason for this resulted from mis-identification and subsequently reporting of LEAs and RUAs in the first two years of this exercise.

The numbers show that LEAs and RUAs have not been used much. This likely is due to either lack of capacity (see section below) to enter into these types of agreement, or absence of a perceived need and therefore interest to enter into such agreements. The review team notes steady reporting of patents since 2013. Cases of IPR use listed in the IA annual reports are mainly related to research and development of improved germplasm. It is important to emphasize that the number of LEAs entered into since the adoption of the IA Principles says nothing about other partnerships that the Centers may have entered into that did not contain exclusivity provisions.

The review team learned that there has been a general increase in Centers' partnerships but some of these have been through consortium models with multiple partners which are non-exclusive and so

do not trigger reporting¹⁹. There is, however, some evidence that Centers avoid certain non-traditional partnership transactions²⁰. For example, one Center IP Focal Point reported avoiding transactions that “involve reporting under the IA Principles because transactions that require reporting are not particularly encouraged”. This statement indicates a “cultural” as well as bureaucratic problem in terms of what is viewed as acceptable and supported within the CGIAR System.

The review team found that most respondents found the Principles to provide useful guidance in negotiations with partners concerning IAs but there were some quite divergent views. Some respondents stressed that the IA Principles have made it challenging in some cases to negotiate partnerships with universities, private firms or other entities that have their own policies relating to IAs which conflict with the Principles, and that adherence to the Principles has delayed the conclusion of contracts. In contrast, it was also reported that the existence of the IA Principles as a System/Center policy had enhanced the Center’s bargaining position, because the potential partners were aware of the conditions the Center must comply with. The following are some of the observations received:

“There have been situations where partners have pushed for agreements that are not in keeping with [the Center’s] IP policy, and the obligation to abide by the IA Principles has been a significant factor in continuing the negotiation instead of giving in”.

“The Principles have, in some situations, guided but not enhanced negotiations with Partners. In other cases, the Principles have hindered or extended negotiations, or have increased the administrative burden to enter into agreements. Examples include:... In cases where the private sector partner is partially or fully funding the research to be carried out by the Center and developing IA in collaboration with the Center as part of the project, the partner’s commercial objectives and goals are generally misaligned with the Center’s priority for compliance with the Principles.”

“A recent experience with an exclusive license that is still under negotiation – the Principles assisted in clarifying and defining the limits of the exclusivity to be given to the private sector company. The donor and national partner relied on the Principles to assist in defining the limits of exclusivity”.

The review team found that the Principles, which build in certain limitations on exclusivity arrangements, have provided an important shield against private sector partners who may “overreach” in agreements and seek to overly control dissemination of research results. The review team considers that the System needs a targeted communications/training effort to confirm to Centers that engagement with partners, including the private sector, is fully permissible under the conditions set out by the IA Principles and to better inform them how to approach complex negotiations with the support, when required, from the System Management Office (SMO).

¹⁹ These findings are supported by the recent IEA evaluation of Partnerships in CGIAR. <http://iea.cgiar.org/>

²⁰ The Partnership evaluation report found that progress in engaging with the private sector has been slow, ibid

3.2.5 Value of the Implementation Guidelines

The Implementation Guidelines for the IA Principles is a comprehensive document that provides advice and guidance on each of the major articles of the Principles, including Farmer's Rights (article 3), Genetic Resources for Food and Agriculture (article 4), Management of IAs (article 5), Maximizing Global Accessibility (article 6), Capacity (article 8), Implementation (article 9) and Reporting (article 10). The review team found the Guidelines to cover most significant topics that were likely to arise and at the right level to provide practical guidance to Center IA managers. The review team's assessment was confirmed through its interaction with the Center IP Focal Points who viewed the Guidelines positively. The following was a fairly typical comment: *"The implementation guidelines are useful as they provide clarity on elements indicated in the IA Principles, including examples"*. However, the Review Team has also identified in this review a number of areas in the Guidelines that should be expanded, notably how the IAs Principles should be applied to areas other than plant genetic resources (see Recommendation 1).

The Review Team also observed that the Guidelines have been effectively supplemented through the Q&A. The review team considers that the Q&A provides an opportunity for rapid interpretation and feedback as situations and questions arise. For this it is important that the Q&A can be revised and disseminated without Center consultation.

Interpretational matters arising through the Q&A may eventually need to be addressed in revised Guidelines. Revisions of the Guidelines require approval at the System-level, and the review team agrees that broad Center consultation is needed. Together, the Guidelines and Q&A provide the basis for sharing best practices that can be updated and revised, one formally, the other flexibly, as conditions change. The review team strongly endorses the concept and interplay of the Guidelines and the Q&A as guidance and informational tools.

Currently, given our observations in differences in interpretation on what is allowed in the Principles, review and revision on the Guidelines may be needed to address the issue of scope (Recommendation 1) and clarify several areas where questions have been raised about flexibility (such as allowance of PVPs and charging of fees).

3.2.6 Capacity to manage IAs

Article 8²¹ of the IA Principles speaks directly to building capacity in the System Organization and Centers "to ensure more effective ... management of IAs and IP Rights". The review team understands Article 8 to reflect the intent, at the time of adoption of the Principles, of developing a serious capability to manage IAs and an interest in establishing a culture within the system that supported engagement with partners, including commercial partners, when needed, to fulfil the CGIAR vision. The single most important constraint identified in the feed-back the team received was capacity, which therefore is discussed here in more detail. Under capacity, the team considered both legal and other competencies for managing IAs.

²¹ Article 8 addresses capacity at System Organization and Centers and adequate resourcing of the capacity by funders.

The IA Principles have been effective in increasing the capacity to address IA issues at the CGIAR System level and Centers, particularly legal capacity. For example, in 2012 and 2013 there was an increase in legal FTE in the Centers. However, the review team noted that, in general, Center IA management has been integrated with a broader legal function, and it appears that in some cases the legal staff is responsible for a range of legal issues (one example was insurance) in addition to IA management. Furthermore, the team is of the view that while there are important legal dimensions to IA management, it is more appropriately viewed as a development function that requires interdisciplinary knowledge and skills related to business and technology management in addition to the law. Thus, it is unclear whether the increased legal capacity actually reflects an increased capability in IA management in the Centers. IRRI's appointment of a Director of Public Private Engagement, complemented by a part-time legal consultant for patent matters, is an encouraging example because this appears to provide dedicated capability in the area of IA management.

Table 2: Change in staff IP capacity at Center level

IA Profiles at Centers	Staff, 2012	Staff, 2016
General Counsel		5
Legal Advisor/ Legal Officer (staff)		11
IP specialist		8
Business development officer		3
Other (program manager/officer)		5
External legal/ IP consultancy*		1
Total	11	33

(Source: IA annual reports; breakdown for 2012 not available)

*refers to a Center which relies primarily on external IP expertise. Six other centers reported on a mix of in-house and external IP experts.

The implementation of the IA Principles has proceeded systematically with a number of positive signs that include increased legal staffing at each Center. In addition, establishment of legal capacity for IA management at the System Management Office, a relatively robust reporting process and launching of the CLIPnet community (see Vb.) of practice have been important developments. However, feedback across different stakeholder groups yielded a very mixed message regarding resources for implementing the Principles for their intended purposes. Even within Centers views were divided on the adequacy of resourcing. The majority of Center IP Focal Points indicated that they were adequately resourced and cited the increase in legal staff over the last 5 years. In contrast, senior management was more likely to stress the lack of capacity. One comment that resonates with the review team and was echoed in donor feedback, reveals that the issue of capacity is seen as a broad management matter:

“While we do our best to have the minimum required personnel to comply with the CGIAR Principles, the resources are not adequate to engage in strategic management of IA for impact. The legal/IP capacity at the Center only allows for achieving compliance and seldom reaches the level of project design and implementation support”

The review team considers that, in spite of the progress made in increasing the (legal) capacity to manage IAs, there is still room to improve that capacity to proactively manage IAs. In fact, most

Centers are not likely to even be aware of their own portfolio of IAs and how to value it. In 2014, CIAT commissioned an IA audit, which led to the recommendation that CIAT establish a Technology Transfer Office to manage the identified IAs. Although the review team did not see this report due to its confidential nature, the recommendation suggests that a sufficient portfolio of IAs was identified to justify a dedicated office. It further suggests that opportunities to protect and transfer existing IAs are not being identified due to the lack of experienced technology managers. The review team has experienced similar situations in universities where the development of an IA management capacity rapidly uncovers previously underexploited IAs. The review team believes that an IA audit should be carried out across the CGIAR system to identify the range of existing IAs and strategies for their transfer to enhance the CGIAR system impact.

The review team also believes that establishing a significant IA management capacity at every Center will be difficult in the current environment of limited budgetary resources. There is value in being a large organization and this is one of those areas where economies of scale in IA management could be achieved by strengthening a System level IA management support and advisory unit with specialized knowledge in contract law, intellectual property and business development.

3.2.7 Efficiency

Senior management responses were unanimous in recognizing that the Principles have increased awareness of the potential to strategically manage IAs at the Center and scientist levels and have increased accountability and transparency across the CGIAR system. Senior management also commented frequently on the value of the guidance that the Principles have provided in decision-making related to IAs and partnerships.

The following testimonies from Legal/IP Focal points provide examples of the enhanced efficiency in IP management:

'The IA Principles and its Guidelines have enhanced good practice of IA management.... Examples are the development of project management system which has enhanced since the Principles' enforcement in 2013, including the existing agreement templates which involves a systematic review process and workflow to ensure compliance of the IA Principles, and the system development for tracking of the background and resulting IAs'.

'...shortly after the approval of the CGIAR IA Principles, our Centre localized the Principles by developing an internal Policy on management of Intellectual Assets. Additionally, the Review Team have proceeded to ensure, among other things, incorporation of Articles that would enable the Team to not only comply with all the requirements of the IA Principles, but also build internal capacity on elements related to IA'.

3.3. Conclusions and Recommendations

The IA Principles have already had positive short-term effects in a number of ways. First, they have promoted an increased harmonization of IA policies across CGIAR Centers and have catalyzed development of a platform for a more uniform approach to managing IAs, and increased awareness of IAs in general. The system is now sharing best practices in both legal and IP matters (see assessment of the CLIPnet in Section 4.2.3). This is a very important development and should yield large dividends in terms of human resource development within both that SMO and the Centers.

There is, however, some mis-interpretation of the Principles as being overly restrictive. In addition, some viewed that Centers should have greater flexibility and autonomy to decide on their own IA matters. Given the objectives of the Principles and the reputational risks involved in managing IAs and entering into agreements with third parties, the review team concludes that the current IA Principles provide a sound policy necessary for maintaining oversight at the system level. The differences in interpretation that may restrict the use of the Principles to the fullest extent possible should be addressed to provide a clear message that the Principles allow for new approaches to IA dissemination and that innovative approaches may be adopted.

The review team found the Guidelines useful and appreciated. They have been effectively supplemented through the “Q&A on Reporting and Implementation”. However, with reference to the team’s recommendation 1, there is need to expand the Guidelines to be more inclusive and elaborated on all types of IA. Other means of communication, including the Q&A are needed to address variance in the interpretation of the IA Principles.

The Principles enabled use of new tools such as LEAs and RUAs, but while the team found that there has not been any notable use of them, those executed have been in compliance with the Principles.

The review team found that the IA Principles have or have the potential to shield Centers against any tendency of partners to seek to overly control dissemination of research results. The team also found some reticence to engage in non-traditional partnerships, including the private sector.

The review team observed a positive effect in capacity; in the first years the efforts have been focused on compliance and the legal aspects of managing IAs. Capacity in IA management needs to go beyond the legal issues to include capacity in business and technology management issues. Regarding recommendation 4 below, the review team considers that the proposed functions would not create a conflict of interest notwithstanding the oversight functions also exercised at the System level. Overall, for making the IA Principles more effective, targeted communications and capacity enhancement is needed to promote full awareness of the flexibility allowed by the IA Principles to engage in acceptable relationships and activities.

Without prejudice to all of the positive effects of the Principles, the review team makes the following recommendations:

Recommendation 2. The System Management Board should oversee the development and deployment of a communications program to create a more uniform understanding across the CGIAR System regarding the opportunities available to enter into partnerships that may add value to the Centers' activities as well as the prudent use of IPRs when needed to enhance impact.

Recommendation 3. To determine the portfolio of existing IAs in the Centers and to better understand their range and value, Centers should be encouraged and supported by the System Organization to undertake an IA audit and develop strategies to ensure their effective dissemination. This applies particularly to those Centers that generate non-traditional IA where CGIARs' awareness of the IA value may be limited.

Recommendation 4. System Organization should develop an interdisciplinary (not just legal) IA Management function at the System-level, designed to support IA management across all Centers with a minimum commitment of 2 full-time professional staff with expertise in contract and intellectual property law and in business and technology management to provide services to Centers as well as advice and training through Q&A or other methods (e.g. workshops). This would be most readily achieved through expansion of the activities and designated responsibility in the System Management Office.

4. Effectiveness of System Governance in Implementation of the IA Principles

4.1. Introduction

The IA Principles were designed to balance the autonomy of Centers with System level oversight. Article 10 of the Principles specifies Center reporting obligations to the System Organization assuring compliance with the Principles, reporting significant IA-related activities from the preceding year as well as reporting from the System Organization to the System Council and to the public. Implementation of System level oversight and reporting has been accompanied by the development of a strong advisory role through the activities of the SMO and its coordination of CLIPnet. This may be an unintended consequence of System level oversight and governance, but it is a positive one. To assess the effectiveness of the governance activities, the review team interviewed the System Management Office staff, the SCIP group, CLIPnet and selected Center IP focal points.

4.2. Assessment

4.2.1 General considerations

In order to provide a basis for oversight and transparency, Article 10 of the Principles provides a detailed framework for System assurance of Center compliance with the Principles and reporting. Annually, Centers are to report on their intellectual assets and their management for review by the System Organization legal team and SCIP (respecting the confidentiality parts of those reports). At this stage, compliance with the Principles is confirmed. Subsequently, the SCIP group provides an independent/external assessment of IA management, and this is included as an independent part of the annual IA report. This peer review provides an additional level of transparency. These reports have been issued annually since 2012 and are comprehensive and very well structured for transparency through public disclosure while still recognizing and respecting the confidential nature of some information. The reports are structured with a “standard” organization that facilitates making year-to-year comparisons. While this is designed as a compliance report to management, there is also the opportunity to elaborate separate, voluntary reports to present examples of successful (or failed) partnerships and creative/effective IA arrangements, which are now partially captured in the proposed draft annual IA reports’ section on “Examples of Centers’ Implementation....”²². The review team considers that such additional reports could provide useful evidence, even anecdotal, of the impacts of the Principles on partnerships and management of IAs in realizing the CGIAR mission.

4.2.2 Reporting

The reporting system is generally seen as reasonable and even a positive tool to gather information from scientists that otherwise would not be collected. The draft template for reporting, the components of which some Centers voluntarily adopted in 2016, has been generally seen as an

²² As of finalizing this report (October 2017), the 2016 IA draft report and may change.

improvement, although a suggestion has been made to consider automating the annual reporting cycle via an online system.

One Center reported that the annual reporting process had the unintended benefit of requiring consultation with the System Management Office which resulted in receiving valuable advice and information in the process. This points to the importance of the System Management Office in providing advice as well as oversight to the Centers.

Regarding transparency, the review team found the current system to be sufficiently transparent although somewhat limited due to the confidential nature of large sections of the Center Annual IA reports. The consolidated annual reports contain general sections on reporting compliance and capacity, system-level activities in support of IA, and also overview of Centers implementation of the Policy including short descriptions of the IPRs taken within provisions of the Policy. Each report has also included a number of recommendations for improving IA management and reporting in CGIAR.

There was a view that the lack of disclosure of the justifications admitted for deviations from the permitted exceptions did not contribute to the transparency of the system and to sharing of best practices. There needs to be an examination of what is actually considered as “confidential information” and ensure that Center IA managers are not unnecessarily guarding information that is not actually confidential. Definitions of confidential information are common in business transactions and can also be found in regulations applicable to institutions that are bound to make information publicly available.

The review team supports recommendations by the SCIP group to expand certain aspects of the reporting by the Centers, specifically to include:

- Centers’ 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) patent application;

Status report of their IP Portfolio, material updates concerning the progress of the LEAs, RUAs and patents/PVPs they have previously reported

- Section on how Centers have implemented the [SCIP] group’s recommendations made in the previous year’s review.

While the Review Team is conscious that the reporting obligations should not impose an excessive burden on the Legal/IP Focal Points, the Team also recognizes the relevance of the proposed additional reporting elements, as they would enhance transparency, improve the sharing of information among Centers, and contribute to address reputational concerns.

Mandatory reporting might be streamlined, however, by focusing it on areas of direct relevance for the application of the IAs Principles, including the implementation of recommendations of the SCIP.

4.2.3 *Role of the System Management Office, SCIP group and CLIPnet*

The System Organization, largely through the System Management Office, and the SCIP group have played a positive role in the developing the capacity to manage IAs effectively and with some consistency across the CGIAR System. The System Management Office has organized the CGIAR Legal/IP Network (CLIPnet), which has built a community of expertise that regularly shares experiences and serves to harmonize approaches across the system. CLIPnet is comprised of Center Legal/IP Focal Points, representatives from the System Management Office and the SCIP group. CLIPnet meets annually over 3 days to share experiences and best practices in IA management as well as to ensure compliance with reporting requirements. In the surveys and interviews the Review Team identified a very positive view of the role of System Management Office in providing advice and in coordinating the CLIPnet activities. The minutes of the CLIPnet meetings also indicate that sharing of best practices across the system is taking place which is slowly increasing the overall capacity in the system.

The formation of CLIPnet, although not formally required by, or part of, the IA Principles, may be one of the most important outcomes of their implementation. This is the organizational vehicle that will allow the ongoing development and sharing of best practices across the System. It is an important role of the System Management Office that should be encouraged and expanded if the CGIAR System expects to realize the intended impact of the Principles. Although some Centers commented that they are not aware of what other Centers are doing, the review team found that there is ample opportunity, primarily through the CLIPnet annual meetings and the annual reports, to share information across the system. The team encourages these events to be used more for sharing.

Overall, the review team considers that the System Management Office, the SCIP group and CLIPnet are among the most important resources contributing to enhanced capacity to manage IAs across the system and considers that resources to this group be maintained, at least at current level.

Similarly, the SCIP group has played an important role in bringing an external perspective to the IA management activities in the CGIAR system. The role of the SCIP is to facilitate coordination between the System Council and the System Organization by working in cooperation with the System Organization with regard to the implementation of the CGIAR IA Principles and advising the System Council so that it can provide adequate oversight of IA management in the CGIAR. The review team found the SCIP group to be highly engaged with the System Management Office and with the issues surrounding IA management. The SCIP plays an important role in oversight and, because they are external to the system provide a level of professional peer review and increased transparency to the IA functions. There is an opportunity for the SCIP to move beyond an essentially oversight role and to play a role in advising how to more strategically manage IAs in CGIAR.

4.2.4 *Financial support for IA Principle-mandated activities*

Article 8.3²³ of the Principles is explicit in how donors are expected to fund the implementation of the Principles. Interviews at the management level have revealed a concern that, even though donors

²³ The CGIAR Funders are expected to provide adequate resources to support such capacity, including through both budget resources for the System Management Board and the System Management Office and full cost recovery arrangements under CRPs and other research proposals to implement the SRF.

continuously push for improved management in the area of IAs, increasingly they do not fully pay for indirect costs. Indeed comments indicated that little support has been given since the adoption of the IA Principles, despite Article 8.3. One respondent commented that, “donors want compliance but are not willing to pay for compliance”. Another respondent noted that ‘The cost of compliance with these policies is financed with the overhead rate of the Centers without necessarily attracting more funding as a result of their implementation’. One suggestion that the review team supports is to allow IA management as a direct cost (rather than funded as an indirect cost) in CGIAR Research Programs (CRPs).

It has also been noted above that there are limitations in the capacity to manage IAs since, although the minimum required (legal) personnel to comply with the CGIAR IA Principles may be assured, *‘the resources are not adequate to engage in strategic management of IA for impact. In the short term, the most cost effective strategy remains to be public domain, even if this is not necessarily allowing us to overcome current bottlenecks. Some of the most critical elements of the IA Principles remain underfunded and without specialist capacity in the CGIAR as a whole’*.

At least in some Centers there is a perception that, despite the importance attributed by donors and the CGIAR system to the subject of the IA Principles, sufficient funding has not been provided to undertake the required tasks and, in particular, to hire personnel with the competence to address the more complex issues of use and strategic management of intellectual assets for effective dissemination of research results and products. The review team thinks, in particular, that the current staff of the System Management Office should be expanded (see Recommendation 4), as it is expected to deal with a variety of matters in addition to the IA issues, with a skilled but limited number of professionals.

4.3. Conclusions

The team concludes that the Principles have enhanced effectiveness of System-level oversight of and confidence in CGIAR’s management of IAs. The System Organization and SCIP group have provided efficient and effective governance and played an important role in enhancing a consistent management of IAs across the CGIAR System. The efforts to coordinate and harmonize IA management and reporting have been effective. Reporting has served transparency, while respecting the confidentiality that may be associated to IP negotiations.

The development of CLIPnet has been a major achievement to support IA management and information sharing across CGIAR, this community could be even further used as a forum for clarifying ambiguities and sharing best practices.

Insufficient funding has been available to undertake all the required tasks, in particular, to hire personnel with the competence to address all aspects of strategic management and use of IAs in enhancing partnerships for achieving wider impact. The Review Team considers that it would be too costly and unnecessary to develop adequate IA management expertise in each Center, but there is an opportunity to create this expertise centrally in order to provide a service, as needed, to CGIAR Centers collectively (see recommendation in section 3.3)

ANNEX I – Team bios



Alan Bennett

Professor Alan Bennett is a member of the Plant Sciences Department at UC Davis and founding Executive Director of the Public Intellectual Property Resource for Agriculture (PIPRA), a non-profit organization that provides strategy advice and intellectual property rights analysis to support the commercialization of public sector innovations and the humanitarian uses of agricultural technologies. His research and publications range from plant cell wall disassembly to public policy issues for agriculture. From 2004-2008, he served as the Associate Vice Chancellor for Research at UC Davis where he founded and managed InnovationAccess, an organization responsible for technology transfer, business development and support for technology-based economic development.

Bennett is a Fellow of the California Council for Science and Technology (CCST), a science policy advisory council for the State of California, and a Fellow of the American Association for the Advancement of Science (AAAS). He served on the U.S. National Academies' of Science Committee on University Management of Intellectual Property. Bennett earned his B.S. and Ph.D. degrees in Plant Biology at UC Davis and Cornell University, respectively and has published over 150 research papers in leading scientific journals and holds several utility patents related to crop quality traits



Carlos Correa

A lawyer and an economist, Professor Carlos Correa obtained his Ph.D. degree from the University of Buenos Aires. His areas of expertise are investment, development and technology transfer, intellectual property, and competition policy law. He is Special Advisor on Trade and Intellectual Property of the South Centre and has been a visiting professor in post-graduate courses of several universities. Prof. Correa was a member of the UK Commission on Intellectual Property, of the Commission on Intellectual Property, Innovation and Public Health established by the World Health Assembly and of the FAO Panel of Eminent Experts on Ethics in Food and Agriculture. He has advised several governments on intellectual property, innovation policy and public health, and served as a consultant to UNCTAD, UNIDO, UNDP, WHO, FAO, IDB, INTAL, World Bank, SELA, ECLA, UNDP, and other regional and international organizations. He is the author of several books and numerous articles. Dr. Carlos Correa has also served as Chair of the Genetic Resources Policy Committee (GRPC) of CGIAR from 2004-2010. For the purposes of this review, the IEA considers that while Correa dealt with issues of intellectual assets and policy when serving the GRPC, this experience is beneficial for the review, and particularly given that the GRPC was closed in 2010, does not pose a conflict of interest.