



IRRI Intellectual Property, Commercialization and Communication Policy

1. Background

IRRI's Intellectual Property, germplasm, expertise and technology commercialization policies and strategy are designed to assist in the delivery of maximum overall impact by accessing existing and new private sector dissemination channels, complementing established impact pathways via public sector partners in developing countries. IRRI's in-licensing activity provides Freedom To Operate ("FTO") and ensures that IRRI can access key and emerging technologies owned by 3rd parties.

The policies, strategies and procedures will be established and carried out *in full compliance* with our mission and our commitments to stakeholders, as a member of the CGIAR where IRRI operates under the provision of the CGIAR Intellectual Assets Principles and Open Data policies (Appendix 4). In addition, IRRI has commitments to the International Treaty on Plant Genetic Resources for Food & Agriculture ("ITPGRFA"), and may have additional commitments to donors (under contracted terms and conditions) to governments (under host country or similar agreements) and to other partners.

The IPCC policies, strategies and procedures will be evaluated regularly, and will be adapted as necessary. Specifically, IRRI will proactively assess results, key success factors and benchmarking with comparable public R&D institutions active in plant breeding, plant biotechnology and agronomy, and with public R&D institutions in other fields as well, such as medicine.

The primary products of IRRI's research are International Public Goods, but IRRI recognizes the potential for contractual and differential access (public versus private) in cases where this addresses our mission (and consistent with our obligations under the CGIAR Intellectual Assets and Open Data policies). IRRI recognizes that appropriate identification and management of IP produces alignment of expectations and interests with the private sector, with a focus on impact acceleration for the benefit of target beneficiaries. A general condition of entering into private sector relationships is that access to the same technology through public sector channels in developing nations is not significantly inhibited or

disadvantaged, although specific and justifiable limitations may apply if proprietary third party technology is accessed. Where these conditions are met, a secondary goal of licensing germplasm or technology is revenue generation, where that revenue will be used by IRRI and its partners to reinvest in its research for development mission.

IRRI recognizes that communication of its policies and practices in the management of intellectual property and commercialization, and assessment of results obtained through such policies, are a high priority with key stakeholders including donors, National Agricultural Research and Extension System (NARES) partners, Governments, civil society, advanced research institutes, the CGIAR System, and IRRI staff. To that end this document provides a proposed codification of practices in communicating on these issues to particular stakeholder groups.

2. Governance and Oversight

Governance

IRRI’s policies on Intellectual Property and Commercialization are set by the Board of Trustees of IRRI, in the context of the CGIAR Intellectual Assets and other relevant policies. The IRRI Board of Trustees has established an IRRI Board Sub-Committee of Intellectual Property and Commercialization (IPCC, see Appendix 5) in order to assist the Board to develop policies and protocols for the management of intellectual property and commercialization. Among other issues, the IPCC will establish criteria for matters that require Board approval and those that are delegated to the Director General to manage.

Oversight

Under the CGIAR Principles on the Management of Intellectual Assets section 10.2 (see Annex 1 of Appendix 6), IRRI provides reports to the System Council IP group on intellectual property protection and commercialization issues (“SCIP”). The Terms of Reference of the System Council IP group are set out in Appendix 6).

3. Protection of Intellectual Property

Amongst generally accepted classes of intellectual property (Table 1; <http://www.wipo.int/about-ip/en/>) IRRI is a potential user of each class of intellectual property (Table1), however, patents and plant breeders rights are the predominant classes of IP relevant to IRRI’s activities in commercialization at this point in time.

Table 1 Classes of Intellectual Property

| Type of Intellectual Property | IRRI's use or potential use |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Copyrights | Access to written materials is usually provided under creative commons. However, more restrictive copyrights may be applied to software, training |

| | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | materials, databases, photos, videos and reports. |
| Trademarks | IRRI protects its own trademark and may protect subsidiary trademarks. |
| Industrial designs | IRRI may in future seek protection of industrial designs for equipment and instruments |
| Geographical indicators * | to be taken out by IRRI, however IRRI may assist a national partner to seek Geographical Indicator protection |
| Patents | Applied in selected circumstances for areas such as novel gene discovery, genome editing and utility patents |
| Plant Breeders Rights | PBR for elite open pollinated and hybrid varieties in selected territories where there is enablement of impact and opportunities with clear benefit. |
| Trade Secrets | Non-disclosure of information must always be time and context bound according to the CGIAR Intellectual Assets and Open Access/Open Data policies. Long term maintenance of a trade secret is highly unlikely to be a strategy utilized in this context and only considered under exceptional circumstances and with Board approval and consultation with key stakeholders (including SCIP). |

*Signs used on goods that are from a specific origin and possess qualities attributable to that region.
Unlikely

3.1 Patent Protection

The following criteria will be considered before IRRI embarks on formal intellectual property protection through the patent system

- a valid patent position can be established (satisfying novelty, inventiveness and utility provisions) taking into account prior art and other background IP issues **and**
- where protection of the trait will provide an incentive for partners to optimize the further development and delivery to end users of a technology on reasonable commercial terms and with no significant long term disadvantage to public sector use of the technology **and**
- the technology has sufficient commercial value in defined territories to justify the expense of protection on the basis of potential return on investment and likelihood of securing an agreement with a commercial partner who will pay patent costs, **and**
- IRRI has primary responsibility for the intellectual property protection and licensing strategy (IRRI's preference is to be the sole owner of patents it files) or an agreement with the entity responsible for licensing that defines a commercialization pathway consistent with IRRI's mandate, **and**
- IRRI is aware, to the extent possible, of prior art and the influence of background intellectual property and other freedom to operate considerations, **and**
- Is allowed under the terms of any relevant contracts with investors in the research, **and**
- The filing of the patent is consistent with the intellectual property policies of both IRRI and the

CGIAR.

- Potential impacts of patenting on Farmer’s Rights are understood and mitigated through the proposed commercialization and licensing strategies

Appendix 1A outlines IRRI’s policies and procedures for the governance and oversight arrangements for Intellectual Property and Commercialization and guidelines for public disclosure.

Appendix 1B is a questionnaire to assist in due diligence and patent filing justification report.

IRRI identifies three general classes of licensing categories (Table 2) for either germplasm or intellectual property. The public sector is offered an NENC license, while private sector licenses are typically either NEFB or LEA, with the possibility of offering NENC on a case by case basis. Each class of license will be limited to defined jurisdiction(s) and for NENC licenses to the public sector will provide clauses to facilitate seed sharing protocols agreed by Bangladesh, Nepal, India, Sri Lanka and Cambodia (see Appendix 7).

Table 2: General Classes of Licensing

| License Class | Exclusivity | Cost Basis |
|---------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| NENC | Non-exclusive for either public or private sector use | No cost access (either license fees, royalties or other charges) |
| NEFB | Non-exclusive for either public or private sector use | Fees and/or royalty provisions will apply for commercial use, and (on a case to case basis) for R&D use as well |
| LEA | Limited-exclusivity arrangements | Fees and/or royalty provisions will typically apply for commercial use and (on a case to case basis) for R&D use as well |

All NENC licenses will require the licensee to only sub-license to another party on the following conditions:

- (a) such license is restricted to the country in which they were licensed
- (b) license to public sector organization are on a non-exclusive, and no-cost basis
- (c) licensing to the private sector requires IRRI’s prior written approval

Limited exclusivity refers to exclusivity for private sector use, and may refer to time-bound exclusivity,

exclusivity within a defined jurisdiction, or exclusivity for hybrid and/or inbred crops. On-licensing of NEFB or LEA agreements will require IRRI's approval.

3.2 Plant Breeders Rights

IRRI may register inbred or hybrid varieties under Plant Breeders Rights in selected territories where such registration is necessary to enhance the adoption and acceleration of use of varieties through either public or private sector channels.

Where IRRI-developed lines are selected for release by NARES partners, IRRI and the NARES partner will jointly agree on whether or not registration of a Plant Breeder's Right is required and which organization will register the right and in which jurisdictions.

For varieties licensed to the private sector, one of the following options applies:

1. The parties may agree there is no requirement for Plant Breeders Rights registration
2. If Plant Breeders Rights registration is considered advantageous, the parties may agree that either the NARES partner, IRRI, or the private sector entity will register the Plant Breeder's Right. However, having done so, there will be no consequential limitation or amendment of the commercialization conditions included in the license to the commercial party.

4. Germplasm Licensing & Commercialization

4.1 Plant Genetic Resources Held in Trust

Plant Genetic resources held by the IRRI Genebank are provided under the terms of the International Treaty for Plant Genetic Resources for Food and Agriculture and the Standard Material Transfer Agreement.

4.2 Plant Genetic Resources Under Development

Germplasm developed by IRRI is classified as "Plant Genetic Resources Under Development" under the framework of the ITPGRFA. All IRRI germplasm is made available to public partners under non-exclusive arrangements using the SMTA + licensing agreement on a no-cost and no-revenue basis (NENC basis). Where the public sector entity registers a variety without further backcrossing, the public sector entity will inform IRRI in writing, and will not on-license the variety to the private sector without IRRI's consent.

IRRI developed germplasm is provided to the private sector for both research and commercial use under SMTA + license agreement for non-exclusive use under terms that define licence fees and royalty

provisions. IRRI reserves the right to offer differential terms, (NENC, NEFB, LEA) to private sector entities at its discretion.

IRRI reserves the right to apply NEFB or LEA based terms when licensing germplasm to private sector partners, when one or more of the following conditions are triggered:

- when private sector partners are in a position to increase impact or reduce time-to-impact as a consequence of having early access or time bound exclusivity for commercial uses. In this case, the material remains available on a NENC basis to public sector entities.
- when private sector partners sponsor R&D projects that are conducted by IRRI which then generate germplasm. The material remains accessible on a NENC basis to the public sector but under an LEA for commercial use.
- Where private sector partners have invested in the development of jointly-owned material; and IRRI and the co-owner have agreed in advance to restrict access under an LEA for commercial use (on ethically acceptable terms that comply with IRRI and CGIAR Intellectual Assets policy requirements, see CGIAR policy on LEA and RUA agreements).
- Where IRRI material has direct application outside of IRRI target beneficiary domains (for example, in agriculture in the developed world). In such cases there would be no limitation on access for public sector institutions within the developing world and for research within public sector institutions globally, however private sector institutions may be granted exclusive access for commercial use in developing world agriculture in specific territories.
- Material in early stage development, where early access by a private sector partner can enhance further development and/or dissemination to target beneficiaries. In such cases access to the material without cost is made available to public sector institutions on an NENC basis, while NEFB or LEA terms may apply to licenses granted to private sector institutions.

Specific provisions apply in a range of other circumstances, including

- Consortia arrangements where terms and conditions are negotiated up front as a condition of membership and access to the products of the research program. For example, HRDC parental lines and hybrids are available to HRDC members under conditions defined in the HRDC guidelines. These terms and conditions are outlined in hrdc.irri.org/become-a-member/
- Genetic material that contains IRRI-patented traits will be provided to public sector partners for R&D and dissemination purposes under an SMTA + NENC license agreement. A two stage

engagement model will typically be followed for private sector use: (1) research evaluation, and (2) commercial use. A license agreement with a private sector entity may involve one or both phases with differential conditions applying to each phase. A research evaluation will typically be licensed on an NENC or NEFB basis and will provide for information on the performance and further development of the trait to be made available to IRRI on a no cost basis. Commercial agreements with the private sector will typically be on a NEFB, or LEA basis, as appropriate.

- Material that contains regulated technologies (GM or gene editing modifications) will be treated on a case-to-case basis given the specific stewardship, regulatory compliance and freedom to operate considerations attached to the dissemination and commercial use of such technologies.

5. Trait Licensing

IRRI will provide access to traits for both inbred and/or hybrid use. All public sector partners will be provided access to traits on an NENC basis, and may apply NEFC or LEA conditions for private sector use.. In each case, IRRI will require the licensee to provide information on the use of the trait, including its incorporation into released varieties and the market penetration achieved by varieties carrying the licensed trait. Additional considerations are:

- Public sector agencies will not be able to on-license to private sector partners without IRRI's consent.
- Traits which require specific stewardship (eg herbicide tolerance), or traits that are relevant to hybrid seed production, may be restricted to hybrid varieties only in order to facilitate adherence to stewardship provisions and to bring a clear added value.
- NERB or LEA licenses will include provision of an obligation to contribute to the Benefit Sharing Fund of the Multi-Lateral System of the ITPGRFA. .

Considerations in negotiating NERB and LEA licenses will include:

- Upfront and milestone payments
- Discounted fees if partners are able to agree to specific commitments towards impact acceleration
- Royalty-bearing exclusive commercial licenses can be considered for developed countries (US, EU, Japan, Australia, South Africa)
- Royalty-bearing exclusivity is possible for non-food applications (ex: biofuels) however there would have to be a demonstration that such use would not have unintended negative affects on achievement of objectives under the Strategy and Results Framework of the CGIAR.

6. Public Private Partnerships

Public Private Partnerships (PPP) assist IRRI to meet the objectives of its mission by engaging private

sector capacity and resources (including financial, R&D and commercialization pathways). In order to provide expertise and to assist in the discussions, PPE will be involved at an early stage in each PPP project. In order to consider entering into a PPP, IRRI will establish:

- Alignment of the objectives of the PPP with IRRI's mission, based on PPE recommendation
- Partner's reputation and ethical standards
- The partner's track record and expertise in marketing and dissemination of innovations of the nature of those to be developed in the PPP
- The partner's contribution, and the R&D and commercialization synergies provided
- The PPP scope, including the development of deliverables (including Foreground IP) relevant to IRRI's mission and IRRI's ability to utilize them independently of the private partner.
- The ability of the partner to establish strong Proof of Concept for innovations developed by the PPP,
- The ownership of Intellectual Property and its use by all parties. IRRI's strong preference is to own any intellectual property generated, with FTO for use by public partners under NENC considerations, with acceptable LEA provisions for use by the private sector partner.
- Acceptable terms for other CGIAR and IRRI policies including those relating to intellectual property, open access and open data.
- Clear understanding of background IP and FTO considerations in the use of any materials or technologies provided by the private sector partner and rights in relation to their use for research, non-commercial dissemination of materials, and commercial use.
- Acceptable provisions relating to publications including the rights of students and researchers to publish within an agreed acceptable timeframe.
- A clear understanding of how the partner will contribute to future assessments of the impact of the technology, and impact acceleration, particularly in relation to the use of the technology within their business systems
- Revenue sharing provisions for technologies developed under the PPP

Example terms and conditions to be included are listed in Appendix 2

7. Background IP, Foreground IP and Freedom To Operate (FTO)

IRRI is conscious of its obligations to ensure that it does not infringe upon intellectual property or germplasm access obligations to third parties. It is further cognisant of the need to ensure that it has freedom to operate on the use of germplasm, technologies and methods.

7.1 Plant Genetic Resources Held In Trust

It is the obligation of the providing party to warrant whether or not there is any encumbrance on the dissemination, research or commercial use of the genetic material. IRRI will apply reasonable due diligence to satisfy itself that the warrant of status of the materials is correct but is not legally responsible for any incorrect warrant. As a general principle, IRRI requests Providers of Genetic Material to be used for research and/or breeding at IRRI, to provide such Material to IRRI under a SMTA .

7.2 Plant Genetic Resources Under Development

IRRI will utilize materials from its Genebank in the generation of PGR-UD under the conditions outlined in 3.5.1. Use of any other material provided by third parties will be based on an MTA (SMTA preferred) ,and subject to disclosure of any terms and conditions by the third party and by IRRI applying reasonable due diligence to satisfy itself of its right to use the material and to provide the material or its progeny to additional parties.

7.3 Technologies

IRRI maps its use of third party intellectual property and where necessary, will obtain external counsel opinion on its exposure for either research, or dissemination and commercial use on a territory by territory basis. (cf guidelines for RUA)

7.4 Copyrights, Industrial designs and Trademarks

IRRI understands that any future extension of use of copyright, industrial design and trademarks may require further development of policy and practices in dealing with background IP and FTO issues.

In case of joint R&D projects or sponsored project with a 3rd party (public and private), the proposal and corresponding agreement will list clearly :

- scope and deliverables of the joint project or sponsored project;
- background IP, ownership and FTO for each party during and after the project;
- expected Foreground IP, ownership and FTO;

8. Communication

8.1 IRRI will make its IP and Commercialization policy publicly available and will update it as required. This will include information about how organizations may enter into partnership with IRRI.

8.2 IRRI will actively communicate its IP and Commercialization policy and guidelines to IRRI staff and provide training in understanding and complying with the policy.

8.3 Communications concerning specific patents, licenses, and other commercialization activities will be conducted in accordance with the guidelines set out in Appendix 1.

List of Appendices

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| Appendix 6 | Terms of Reference of the System Council IP group |
| Appendix 7 | Cooperation between Bangladesh, Cambodia, India, Nepal and Sri Lanka in Seed Sector |

List of Abbreviations

| | |
|-------|-------------------------------------------------------------|
| FTO | Freedom To Operate |
| IP | Intellectual Property |
| LEA | Limited Exclusivity Agreement |
| NARES | National Agriculture Research and Extension Services center |
| NEFB | Non-exclusive, Fee-bearing |
| NENC | Non-exclusive, Non-commercial |
| PPE | Public Private Engagement Unit |
| PPP | Public Private Partnership |

APPENDIX 1

Governance, oversight arrangement and public disclosure arrangements for Intellectual Property and Commercialization

| | Director General | IPC Committee of the IRRI Board of Trustees | Board Chair | Full IRRI Board of Trustees | SCIP | Public Communication |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessment of an IP filing opportunity | Approves internal process to satisfy patent protection criteria and engagement of external counsel as required. | | | | | |
| Filing of a Provisional Patent | Approves | Informed at next meeting | Informed out of session | Informed at next meeting | Informed through Annual Report (as per requirement for IPRs) | No disclosure except as may be required to address the following: (i) IRRI’s licensing of germplasm or traits associated with the patent (as indicated below)’; and (ii) reputational risk concerns as may arise which are not addressed on IRRI’s website (e.g. FAQ) |
| Filing of a PCT phase application | Recommends filing to IPCC | Recommends filing to IRRI Board | Approves filing out of session | Informed at next meeting | Informed through Annual Report (as per requirement for IPRs with outline plan market strategy including impact | No disclosure except as may be required to address the following: (i) IRRI’s licensing of germplasm or traits associated with the patent (as indicated below)’; and (ii) reputational risk |

| | Director General | IPC Committee of the IRRI Board of Trustees | Board Chair | Full IRRI Board of Trustees | SCIP | Public Communication |
|--------------------------------------------------------------|--------------------|---------------------------------------------|-----------------------------------|-----------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | achievement objectives) | concerns as may arise which are not addressed on IRRI's website (e.g. FAQ) |
| Publication of a PCT phase application | No action | No action | No Action | No action | No action | Posting of notice to IRRI Web Site |
| Withdrawal of A Provisional Filing | Approves | Informed at next meeting | Informed out of session | Informed at next meeting | Informed through Annual Report (as a courtesy) | No Disclosure |
| Allowing a PCT stage patent application to lapse | Recommends to IPCC | Recommends action to Full Board | Considers as member of full board | Approves | Informed through Annual Report (as a courtesy) | Posting of notice to IRRI Web Site to announce application has lapsed |
| Proceeding to Examination of a Patent | Approves | Informed at next meeting | Informed out of session | Informed at next meeting | Informed through Annual Report (as a courtesy) | No disclosure |
| Initiation of defense of a patent in response to a challenge | Recommends to IPCC | Recommends action to Full Board | Considers as member of full board | Full Board Approves | Informed through Annual Report (as a courtesy) | No disclosure |
| Grant of Patent Claims | No action | No Action | Informed out of session | Informed at next meeting | Informed through Annual Report (as per requirement for IPRs) | Posting of notice to IRRI Web Site to announce grant of patent Additionally, public communications shall address the following: (i) IRRI's licensing of |

| | Director General | IPC Committee of the IRRI Board of Trustees | Board Chair | Full IRRI Board of Trustees | SCIP | Public Communication |
|----------------------------------------------------------------|--------------------|-------------------------------------------------|-------------------------|-----------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | | germplasm or traits associated with the patent (as indicated below)”; and (ii) reputational risk concerns (e.g. farmers rights, native traits, biotechnology stewardship, reinvestment of revenues in research etc.) |
| Licensing of germplasm or traits | | | | | | |
| Execution of a non-exclusive research evaluation license | Approves | Informed at next meeting | Informed out of session | Informed at next meeting | Informed through Annual Report (as a courtesy) | No disclosure |
| Execution of a limited exclusivity research evaluation license | Recommends to IP&C | Recommends action to Board Chair out of session | Approves out of session | Informed at next meeting | Informed through Annual Report (as a courtesy) | Posting of notice on IRRI Web Site stating the nature of the technology, the territory and the licensee |
| Execution of a non-exclusive commercial license | Recommends to IP&C | Recommends action to Board Chair out of session | Approves out of session | Informed at next meeting | Informed through Annual Report (as a courtesy) | Posting of notice on IRRI Web Site stating the nature of the technology, the territory and the licensee |
| Execution of a limited | Recommends to IP&C | Recommends to Board Chair | Approves agreemen | Approves agreements | Informed through | Disclosure on a PPP register on |

| | Director General | IPC Committee of the IRRI Board of Trustees | Board Chair | Full IRRI Board of Trustees | SCIP | Public Communication |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| exclusivity commercial license or restricted use agreement (LEA or RUA as defined in IA Principles) | | | ts with projected whole of life value of <\$1m USD | with projected whole of life greater than \$1m | Annual Report (as per requirement of LEAs and RUAs), including confidential information shared with SCIP regarding financial arrangement | the IRRI website of the main objectives of the PPP, the nature of the partners, the timeframe of the agreement, and an overview of any limited exclusivity terms of the contractual agreement |
| Public Private Partnerships | | | | | | |
| Execution of a Public Private Partnership agreement | Approves if annual budget less than USD \$1m | For agreements with annual budget >USD\$1m, recommends to Board Chair | Approves agreements with annual budget between USD \$1m and \$5m | Approves agreements with annual budget greater than \$5m | Informed through Annual Report (as a courtesy) | Disclosure on a PPP register on the IRRI website of the main objectives of the PPP, the nature of the partners or investors, the timeframe of the agreement, and an overview of any limited exclusivity terms of the contractual agreement |
| Other commercialization arrangements (eg formation of a joint venture) | Recommends to IPC | Recommends to Full Board | Considers as part of full board | Approves | Informed through Annual Report (as a courtesy) | Disclosure on a PPP register on the IRRI website of the main objectives of the PPP, the nature of the partners or investors, the timeframe of the agreement, and |

| | | | | | | |
|--|------------------|------------------------------------------------------|----------------|--------------------------------|------|------------------------------------------------------------------------------------------|
| | Director General | IPC Committee of the IRRI Board of Trustees | Board Chair | Full IRRI Board of Trustees | SCIP | Public Communication |
| | | | | | | an overview of any limited exclusivity terms of the contractual agreement |

Appendix 1 B

Questionnaire to assist development of a confidential patent filing justification report

Re Invention

- a. description of the invention
 - i.e. what is the invention; what challenge(s) does it addresses; what are its advantages over existing technologies
 - Center FTO on source material and/or background technology used
- b. Proof Of Concept (POC) already achieved and future POC needed
- c. annex or link to patent filing so that a detailed description and claims are readily accessible
- d. commercial potential of the technology
 - i.e. brief description of key industries and geographic markets in which the technology has significant commercial potential (if any), include estimated value of market if known
- e. impact potential of the technology
 - brief description of key industries and geographic markets in which the technology has significant impact potential (if any), include impact
 - related indicators if known
- f. Ownership, FTO (freedom to operate) and IP management arrangements for the invention (actual or anticipated)
- g. funding sources for the project under which the invention was made, if any, and specific commitment to the Donors if any
- h. development status
 - i.e. whether any development partners are involved or under consideration and what is anticipated to be required in terms of activities, time and money to take the technology to market

Re Dissemination

- i. outline of the actual or anticipated dissemination strategy, including:
 - priority market(s) being targeted with a patent protection and/or a licensing strategy
 - is the key objective mainly commercial or impact driven ?
 - what is the anticipated timeframe/pathway for entry and are there specific companies or institutions engaged or under consideration?
 - non-priority markets

what is the main anticipated dissemination pathway?

-

- j. status re research and commercial licenses that have been granted (if any, including any LEAs reported or anticipated to be reported)
- k. extent to which NARES or other public institution stakeholder partners are involved or are anticipated to be involved?

Re Justifications and challenges

- l. Center's rationale for the patent application
 - why is a patent protection necessary to further improve the technology and/or enhance the scale and scope of impact?
 - what advantages does a patent provide that would not otherwise be available?

Zero draft questionnaire to assist development of a confidential patent filing justification report (version 120717)

- what process has the Center gone through in evaluating whether to pursue a patent strategy?
- m. self-identification of challenges and reputational risk issues and an outline as to how they are being addressed
 - e.g. farmers rights, GMO/synthetic biology, native traits, Nagoya compliance, disclosure of origin

Updates

- n. updates to be provided in subsequent years concerning the progress of the patent applications and the dissemination strategy for the technology
 - e.g. this could be handled through an online register with suggested word limit of 250 words

Appendix 2

Examples of key terms and conditions to be included in proposals and agreements

- Definition of the scope of the project
- List the nature of expected Foreground IP, ownership, and FTO during and after project
- List expected the deliverables and FTO on deliverables
- Define the rights of IRRRI to reporting and communication on agreements, including report to the Board of Trustees and SCIP
- LEA and RUA review – specific clauses, as needed
- IRRRI commitments to partner including clauses relating to milestone reports, deliverables, IP management
- Partner commitments to IRRRI including payments according to schedule, milestone reports, commitments to product development, impact assessment and impact acceleration

Appendix 3

Risk Management Approach

A risk management approach is adopted when implementing IRRI's IP and Commercialization Policy and protocols under the framework of the IRRI Risk Management and Quality Assurance policy. Resources are allocated to manage risk through IRRI's Risk Management and Quality Assurance unit, which reports through the Director General to the IRRI Board of Trustees.

Key risk mitigation steps include:

- Compliance with IRRI and CGIAR policies and Donors policy (ex BMGF policy on open source / open access) on Intellectual Assets and Commercialization
- IP management system maintained and subject to regular reviews
- Rigorous IP record keeping
- Minimizing infringement risks through FTO analysis and staff training
- Effective communication of the primary impact acceleration objective and transparency around policies and processes so as to ensure donor, partner, stakeholder and staff concerns are met
- Protection of IRRI's ability to provide technologies and Material through the public sector
- Careful selection of PPP partners and licensees based on capacity, reputation and ability to deliver against impact goals
- Avoidance of the "moral hazard" of partnering for the sake of income generation rather than impact acceleration
- Understanding and balancing the risk of not protecting and commercializing intellectual property in a rapidly changing rice sector
- Community of practice / training / capacity building / partnerships with CG Centers and our NARES partners

Appendix 4

1. Link to CGIAR Principles:
<https://library.cgiar.org/bitstream/handle/10947/4486/CGIAR%20IA%20Principles.pdf?sequence=1>
2. Link to CGIAR Open Data Policy:
<http://library.cgiar.org/bitstream/handle/10947/4488/Open%20Access%20Data%20Management%20Policy.pdf?sequence=1>
3. Link to ITPGRFA:
<http://www.fao.org/plant-treaty/en/>

Appendix 5



THE BOARD OF TRUSTEES

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Appendix 6

1. Link to “Terms of Reference for the System Council Intellectual Property Group (“SC IP Group”) established under the CGIAR IA Principles (refer to Annex 1 of the CGIAR Principles)
<https://library.cgiar.org/bitstream/handle/10947/4486/CGIAR%20IA%20Principles.pdf?sequence=1>

Appendix 7

1. Asian countries sign agreement on seed-sharing
<http://www.fareasternagriculture.com/crops/agriculture/asian-countries-sign-agreement-on-seed-sharing>
2. Agreement on multi-country seed-sharing reached
<http://irri.org/news/media-releases/agreement-on-multi-country-seed-sharing-reached>