

International Livestock Research Institute  
Intellectual assets report 2016

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*better lives through livestock*

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## INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE (ILRI) IA Report for 2016

### Part 1 Intellectual Assets Management at Center Level (Non-Confidential)

#### General information regarding the implementation of the CGIAR IA Principles during the preceding year (NOT CONFIDENTIAL)

1. Capacity related to implementation of the CGIAR IA Principles	<b>A. Key staff involved in the implementation of the IA Principles<sup>1</sup>:</b>			
		Name and position of key staff	Brief summary of role and responsibilities	FTE equivalent if fixed or approx. # of days per year if irregular
	Employees	<p>1. The IP and Legal Unit (IP &amp; L Unit) is led by <b>Ms. Linda Opati - IP and Legal Counsel</b> (the IP focal point). She joined ILRI in 2009, is a qualified lawyer with a Post-graduate specialization (with distinction) in IP Law -University of South Africa, an Advocate of the High Court of Kenya, Commissioner for Oaths and Notary Public</p> <p>2. <b>Ms. Muthoni Mucheru – Legal Officer</b>, a qualified lawyer, Advocate of the High Court of Kenya, Commissioner for Oaths, with several WIPO IP certifications. She is currently pursuing a Masters in Law (International Trade and Investment</p>	<p>The IP and Legal Counsel is responsible for leadership, strategic planning, budgeting, risk identification and mitigation, legal and IP compliance and contracts management while the Legal Officer is responsible for and provides support with the day to day contracts management processes and legal and IP support.</p> <p>A general overview of the Unit's responsibilities is as follows:</p> <ul style="list-style-type: none"> <li>▪ Management of legal affairs and compliance</li> <li>▪ Management of contracts Legal compliance with host country agreement and local laws</li> <li>▪ Management of IP and compliance</li> <li>▪ Management and compliance with host country agreement and local laws wherever ILRI operates</li> <li>▪ Management of Legal affairs of ILRI regional and country offices</li> <li>▪ Legal and administrative support to ILRI board</li> </ul>	<p>The IP and Legal Counsel and the Legal Officer are full time ILRI staff.</p>

<sup>1</sup> Excludes staff involved in Open Access implementation as this is addressed in Section 8 below.

	Law). Muthoni joined ILRI in 2013.	<ul style="list-style-type: none"> <li>Legal and administrative support to Kapiti and Kapiti board (a public limited company wholly owned by ILRI, it is a ranch utilized by ILRI for its research activities).</li> <li>Trainings, awareness, communication and capacity building in IP and compliance</li> </ul>	
Consultants <sup>2</sup>	1. NONE	-----	-----

**B. Training, workshops or other activities in 2016 to build capacity of key staff involved in implementation of IA Principles: [N/A or describe extent/nature of support; recommended max {300 words}]**

**i. The IP & Legal Counsel attended the following training:-**

**26 - 30 September 2016**, Nairobi, Kenya - ***Sub regional Workshop on Access and Benefit-sharing*** organised by the Deutsche Gesellschaft Für Internationale Zusammenarbeit (GIZ ABS) Initiative, Germany. Content covered:

- ABS and the Nagoya Protocol
- Regulatory frameworks
- ABS case studies
- ABS compliant R&D
- Benefit sharing clauses in ABS agreements
- Traditional knowledge, indigenous and local communities;
- Country implementation of ABS regulations.

**Impact:** This was useful to improve awareness and understanding of the Nagoya Protocol vis a vis the ITPGRFA and ABS compliance requirements for ILRI research activities globally.

<sup>2</sup> If you do not wish to disclose the identity of the consultant indicate 'consultant [1]'

**ii. Attended by both Lawyers:-8<sup>th</sup> July, 2016 Strathmore Law School, Strathmore University Nairobi Kenya (Centre for Intellectual Property and Information Technology Law and Strathmore University) *Seminar on Advising your Client in Intellectual Property Rights*. Content covered:-**

- Traditional forms of IP –how to recognize and advise the issues;
- Emerging issues and non-traditional forms of IP;
- Using the International IP system;
- Determining appropriate Licenses and other types of Agreements
- Review principles of IPR, International systems, licensing, and business models built on IPR

**iii. Continuous legal education**

As required by the Law Society of Kenya, the Legal Counsel and Legal Officer have to attend a number of legal trainings annually to qualify for renewal of their practising licenses and to stay abreast with developments in law in Kenya. This requirement was complied with for 2016.

**iv. CGIAR IP community of practice.** Both officers participated in several webinars organised by the CGIAR IP community of practice (CLIPnet)

**C. Training, workshops or other capacity building activities in 2016 by key staff involved in implementation of IA Principles: [N/A or describe extent/nature of support; recommended max {300 words}]**

**ILRI Institute Planning Meeting (IPM)** held in Nairobi 4-7 October 2016. This event was attended by almost all ILRI scientists and staff. The IP & L Unit showcased its work and functions through poster exhibits and one-on-one consultations with staff on IP and legal issues. Find the links to the posters below.

<http://hdl.handle.net/10568/80018>

<http://hdl.handle.net/10568/80017>

<http://hdl.handle.net/10568/80016>

**D. Capacity statement:** [Confirm whether the Center considers its IP staffing capacity in 2016 to be sufficient for its needs and to effectively implement the IA Principles. If not, identify limitations and whether plan is in place to address capacity issue(s); max {200 words}] Excludes staff involved in Open Access implementation as this is addressed in Section 8 below.

ILRI confirms that it has sufficient Legal and IP capacity. The Unit has however requested for additional administrative support which has been approved by the Unit's supervisor Shirley Tarawali for implementation in 2017. This position will support administrative tasks such as printing, filing contracts and other documents, typing letters etc.

2. IP and related policies	<p>A. The <b>CGIAR policy table</b> (available <a href="#">here</a>) is current as at the date of submission of this Report and includes all Center policy changes in 2016 related to the implementation of the CGIAR IA Principles: <b>[Yes/No]; [If No, provide comments; recommended max {150 words}]</b></p> <p>YES it is current.</p> <p><b>B. Comments, if any, concerning policy activity in 2016 or anticipated activities in 2017]: [recommended max {150 words}]</b></p> <p><b>ILRI Ethical Photography Guidelines</b> - The IP &amp; L Unit with support from ILRI’s Communications and Knowledge Management Team, is in the process of developing the said guidelines, intended to ensure that the human rights and dignity of persons whose images are used in ILRI or other publications where ILRI is represented are protected. The draft is still undergoing internal review.</p> <p><b>ABS (Access and Benefit Sharing) Standards or an ABS Policy</b> – ILRI through the IP &amp; L Unit has entered into a MoU with the GIZ ABS Initiative for cooperation in ABS compliance and capacity building, specifically for ILRI’s research work in animal genetic resources. The objectives of this MoU include:-</p> <ul style="list-style-type: none"> <li>• awareness of and compliance with ABS laws and emerging issues wherever ILRI operates</li> <li>• increasing need for ILRI and partners to deal with and comply with ABS issues and country legislations;</li> <li>• capacity building, training and awareness through convening common training workshops and developing policy guidance;</li> </ul> <p>The above activities are targeted for implementation in 2017.</p>
3. IP portfolio (trademarks, patents and PVP)	<p>A. The <b>CGIAR IP portfolio</b> (available <a href="#">here</a>) is current up to at least 31 December 2016 regarding all trademarks, patents and PVPs associated with intellectual assets produced by the Center (i.e. whether (co)filed/(co)owned by the Center or by a partner): <b>[Yes, current up to [insert date]/No, current up to [insert date]]</b>; <b>[If No, provide comments; recommended max {150 words}]</b></p> <p>NO</p> <ul style="list-style-type: none"> <li>• The ILRI portfolio is current up to 22 July 2016 when an international patent was filed Title: <i>Mycoplasma Vaccines and Uses Thereof</i>; PCT/CA2016/050864; <b>International Filing Date</b>: 22July2016 between the University of Saskatchewan (VIDO-InterVac), Kenya Agriculture and Livestock Research Organization (KALRO) and International Livestock Research Institute (ILRI) - the “Joint owners and joint Licensors of the patent and related technology”.</li> <li>• VIDO-InterVac- and KALRO were the recipients of grant funds awarded by the International Development Research Centre of the Government of Canada that funded research resulting in the Patent. ILRI was a subcontractor of the IDRC Grant. VIDO-InterVac is the Patenting Party and responsible for leading the patenting and commercialization strategy.</li> <li>• The donor IDRC has decided that a license for commercialization be awarded to the Kenya Veterinary Vaccines Production Institute (KEVEVAPI) in</li> </ul>

	<p>Nairobi, Kenya. While the donor preferred an exclusive license, ILRI Legal Unit requested a non-exclusive license limited in duration (7 years has been proposed by ILRI), restricted field of use to ‘a vaccine for chronic bovine pleuropneumonia (CBPP) in cattle’ and a “Food Security Emergency” clause.</p> <ul style="list-style-type: none"> <li>• KEVEVAPI’s lawyers have recently informally (yet to send official response) notified ILRI that they are not agreeable to a non-exclusive license.</li> <li>• ILRI will therefore prepare the relevant documents to the System Management Office with the view of seeking guidance and requesting for an exemption to enter into an exclusive license, should this meet the necessary approvals</li> </ul> <p>B. All trademarks, patents and PVPs recorded in the CGIAR IP portfolio associated with intellectual assets funded by or otherwise produced within the scope of a CRP (i.e. whether (co)filed/(co)owned by the Center or by a third party) have been notified to the applicable Lead Center? <b>[Yes/No]; [If No provide comments; recommended max {150 words}]</b></p> <p>YES</p>
<p>4. General management practices associated with Centre Intellectual Assets</p>	<p>The survey regarding general intellectual asset management practices in Annex 1 is complete and current up to at least 31 December 2016 <b>[Yes, current up to [insert date]/No, current up to [insert date]]</b>; <b>[If No, provide comments; recommended max {150 words}]</b></p> <p>YES current up to 31 December 2016. Kindly note Annex 1 will be provided as a separate document or file.</p> <p><b>Statement regarding sound intellectual asset management practices:</b> <b>[Confirm whether the Center considers its IA management practices in 2016 to be sufficient for its needs and to effectively implement the IA Principles. If not, identify limitations and whether plan is in place to improve particular practices in the following year(s) (subject to priority setting, human resources, financial resources etc.); recommended max {300 words}]</b></p> <p><b><u>Confirmation that ILRI IA management practices in 2016 was sufficient for ILRI’s needs and to effectively implement the IA Principles</u></b></p> <p>ILRI confirms that its IA management practices for 2016 was sound. ILRI continues to take steps to enhance compliance as set out below:-</p> <p><b>i. Updated research contract templates:</b> In 2016 the Legal Unit updated all its research contract templates, with the support and approval of Management to ensure continued compliance and sound management of IP and legal issues. The updated templates were rolled out in July 2016 to all staff explaining key updates as follows:-</p> <p>The full list of all the research templates was shared for awareness. In particular the new CRA (collaborative research agreement) template was updated with the new <b>CGIAR system organization</b> changes and the following:-</p> <p>a) under ‘<b>IP management for global access</b>’ in compliance with <b>CGIAR IA Principles and ILRI IA Policy</b> new clauses were inserted to support and encourage:-</p>

collaborations with the private sector (PPPs) for product development/commercialization (through limited exclusivity license agreements) or access to private sector IP (restricted use agreements) and new annexes (tools) to support projects keep track of both background and project IP i.e. the background IP due diligence forms and the Project IP inventory form.

ii. In compliance with **CGIAR and ILRI open access policies** an updated section on **Open access; Data management and quality; and mandatory acknowledgement of CGIAR fund donors for CRP W1/W2 funds as follows:**

**Acknowledgement of CGIAR Fund Donors. [CRP W1/W2 FUNDS ONLY, DEL otherwise].** All CRP-funded communications products must acknowledge the full name of the CRP and include the following statement and hyperlink:- *This research is supported by donors to the [CGIAR System](http://www.cgiar.org/about-us/our-funders)*. Where a hyperlink is not possible, include this URL: <http://www.cgiar.org/about-us/our-funders>.

iii. **Quality control** - Staff was also informed that all these templates are (as has been the practice) available and accessible only through their designated Program Managers and the Legal unit, as the control points.

iv. Please find below the list of updated (and some new) templates and IP management tools rolled out in 2016.

ILRI Research Contract Templates & IP management tools	
• Memorandum of Understanding (MoU)	• Agreement for access to and use of the BecA-ILRI Hub
• CRA + Instruction memo (including CRAs for CRPs) <i>*note PIA (program implementation) and PPA (program participant) templates for CRPs are provided by the CG</i>	• Agreement for access to and use of the ILRI forage diversity laboratory
• Background IP Due Diligence Inventory Form	• Material Transfer Agreement (MTA)
• Project IP Assets Inventory	• SMTA (standard material transfer agreement)
• Global access and IP due diligence questionnaire (BMGF-funded projects)	• Service Agreement for Transfer and Testing of Materials
• IP and Open access standard template clauses ; IP checklist for ILRI research agreements	• Joint Appointment Agreement
• Global Access Strategy template	• Graduate Fellowship Agreement
• Invention Disclosure Form	• Hosting Services Agreement
• Joint agreement for the establishment of a research consortium (Consortium Agreement)	• Host Country Agreement template
• Research Consortium Subgrant Agreement	• Service Agreements (fixed fee)
• Letter of Agreement	• Informed Consent Template
• Amendment template	• MoU on Co-Authorship
• Non-Disclosure Data Sharing Agreement	• ILRI FAQs on IP and management

**v. Compilation of standard Donor IP conditions** – The IP & L Unit initiated a database documenting the major donor’s IP conditions which are periodically shared with Principal Investigators and Program Managers to enhance and support full compliance. These conditions are also uploaded on OCS by the designated Program Managers as part of project documentation.

**vi. Open Access (OA) committee established** - The Deputy Director General – Integrated Sciences (Iain Wright) has constituted an open access committee tasked with overseeing and supporting OA compliance. The committee chaired by him also includes the Assistant Director General (ADG) Biosciences (Dieter Schillinger), Director of the BecA-ILRI Hub (Appolinaire Djikeng), CRP Livestock Director (Tom Randolph), Head of Communications and Knowledge Management (Peter Ballantyne), Team Leader Research Methods Group (Jane Poole) and the IP and Legal Counsel. The committee will hold its second meeting on 2 March 2017.

**Limitations to ILRI IA management include:-**

Monitoring IP compliance beyond ILRI eg. of our partners or recipient of ILRI genetic resources or confidential information is a challenge and beyond the capacity of the IP and L Unit, despite awareness creation and reaffirming the need for staff and partners to respect IP terms and conditions

An IP management software would be useful for tracking and managing inventions, patents, trademarks, related contracts (licenses, Material Transfer Agreements (MTAs), get better visibility into ILRI’s IP portfolio and ability to manage ILRI IP day-to-day and at a strategic level, generally reducing the administrative burden with a manual system. Discussions on this have previously been had with the CGIAR IP Community of Practice and that a shared system is preferable to cost-share making it generally less expensive in terms of the customization needs, human and financial resources and maintenance fees.

Exclusive versus Non-exclusive licenses in PPPs. As explained at 3 above, KEVEVAPI will be pushing for an Exclusive License and an application for exemption will be submitted by ILRI to the System Office.

Annual meetings of CGIAR IP Community of Practice (CoP) – Unfortunately no meeting was convened for 2016 (even though the virtual Webinars are very useful). The importance of this CoP remains critical to sharing, networking, learning and generally improving IP compliance. It is hoped that the CoP will convene in 2017.



	<p><b>Plans to improve IP management practices:-</b></p> <ul style="list-style-type: none"> <li>○ <i>Audit of ILRI's research compliance requirements globally</i> – This is scheduled for 2017 to assess the current status including what research licenses, certifications etc are in place, compile and document them, identify gaps if any. This will be done jointly between the IP &amp; L Unit and the Environmental Occupational Health and Safety Unit (EOHS).</li> <li>○ <i>Establishment of an ABS committee</i> - This is scheduled for 2017 to be led by the ADG Biosciences. This will spearhead ILRI's compliance with ABS regulations wherever ILRI operates and ensure alignment.</li> <li>○ <i>Establishment of ABS practices and guidelines for ILRI</i> – The cooperation with the GIZ ABS Initiative (see 2 above) will play a critical role in this.</li> <li>○ <i>Establishment of ILRI ethical photography guidelines</i> – see 2 above</li> <li>○ <i>IP management software</i> - The IP &amp; L unit is keen to have discussions on a shared IP management software revived at the System Management Office level and during the 2017 CGIAR IP CoP meeting.</li> </ul>
<p>5.Issues related to the International Treaty on Plant Genetic Resources for Food and Agriculture (if applicable)</p>	<p><b>Method(s) of reporting and the most recent date of reporting SMTA transfers to Secretariat of ITPGRFA: ["n/a" or describe (e.g. Easy SMTA); recommended max {150 words }]</b></p> <p>ILRI does batch reporting on an annual basis. The last update was on 31 May 2016.</p> <p><b>SMTA reporting to Secretariat of ITPGRFA which is pending (if any): ["n/a" or describe the reporting that is pending and the timeframe for completion; recommended max {300 words }]</b></p> <p>The reports on transfers from ILRI in 2016 are still pending for SMTA reporting. All reporting will be concluded by end March 2017.</p> <p><b>Highlights relating to access, use and benefit sharing concerning genetic resources and traditional knowledge pursuant to CBD/Nagoya Protocol: ["n/a" or describe; recommended max {500 words}]</b></p> <p><b>i) Highlights from the ILRI forages gene bank facility in Ethiopia, Addis Ababa Campus</b></p> <ul style="list-style-type: none"> <li>○ <b>Renovation of the genebank</b> - ILRI has renovated the forage genebank, added an additional cold-room, based on the recommendations of the CRP genebank review, and expanded labs with the capacity to handle research requiring biosafetly level 2 facilities. These will be completed in early 2017.</li> <li>○ <b>Seed viability monitoring</b> – the data will be used to estimate seed longevity and set monitoring intervals under medium term genebank storage conditions for 54 genera. There was no published information on seed longevity during cold storage in genebanks on which to base management decisions for the majority of these species.</li> </ul>

- **Improved data quality and time savings** - from bar coding and e-data recording with the MTS bar coding on-going and the LTS bar coding completed and all characterization data being collected digitally for the first time in 2016.
- **Selection of GRIN Global** as the new data platform and migration of some major data tables to the new platform.
- **ILRI passport data** verified and additional data on accessions added and published online in GENESYS in August 2016 for easy access for users.
- **The genebank Platform** now has a Policy module that will be advising and leading activities around crop germplasm and ABS policies. As member of the Genebank platform ILRI will benefit from this.
- **CIAT ILRI Joint Forage Genebank management** - CIAT and ILRI are developing an MOU in support of a collaboration which would bring their individual forage collections under one virtual collection. Both Centres are looking at establishing a joint appointee between CIAT and ILRI who will be responsible for the management of this collection.

#### ii) Highlights from the IP & Legal Unit

- **ABS cooperation between ILRI and GIZ ABS Initiative** - Please see section 2 regarding the establishment of ABS standards/guidelines/policy, capacity building and other activities.
- **ILRI Ethical Photography Guidelines** – Please see section 2, this is part of compliance with informed consent requirements of ABS
- **Updates to research templates and tools** – Please see section 4, new templates were developed or updated including Agreement for access to and use of the ILRI forage diversity laboratory, the MTA, and the Informed Consent Template.

#### iii) Highlights from ILRI scientists' publication on Informed Consent

Please find a publication (link here <http://dx.doi.org/10.1016/j.prevetmed.2016.04.008>) by ILRI scientists titled “Towards better-informed consent: Research with livestock-keepers and informal traders in East Africa” (Tarni Louisa Cooper, Yumi Kirinoa, Silvia Alonso, Johanna Lindahl, Delia Grace) © 2016 published by Elsevier B.V (this is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)).

The publication highlights the importance of facilitating dialogue during the informed-consent process for a more nuanced understanding of relationships between humans, animals, and their environment. It also offers lessons on how the requirement to sign consent forms might limit consent among workers in informal markets, various approaches are then explored. A significant difference in comprehension and engagement in the informed-consent process was found between tools, and cartoons had the highest (i.e. best combined comprehension and engagement) scores. There was a significant enumerator-effect on both overall consent and the methods chosen.

iv) New legislation and regulations in Kenya requiring registration and research licenses.

Following the enactments of the 2013 Science, Technology and Innovation Act - ST&I Act and the ST&I Research Licensing and Registration and Accreditation of Research Institutions Regulations, the National Commission for Science, Technology and Innovation (NACOSTI) which is responsible for the regulation of research activities in Kenya, issued a notice to all CGIAR Centres in Kenya to: - (a) Register with NACOSTI and (b) Obtain Research Licenses for all scientific staff and affiliates. CGIAR Centres' representatives in Kenya have been engaging with NACOSTI on the two issues above given the implications to the freedom to operate in Kenya. Following a meeting between CGIAR Centres and NACOSTI representatives in Naivasha, Kenya on 21-23 September 2016, NACOSTI indicated its willingness to exempt CGIAR Centres from the research licensing requirement. ILRI has referred the issue of registration to the Ministry of Foreign Affairs for legal interpretation and guidance, particularly regarding the implications of such registration vis-à-vis ILRI's immunities, privileges and freedom to operate, conferred by the Host Country Agreement. The Ministry is yet to respond and ILRI is following up. ILRI is also in the process of submitting the application for research exemption to NACOSTI.

How does the Centre promote **farmers' rights** under Article 9 of the Treaty (e.g., protecting traditional knowledge related to PGRFA; right to equitable sharing of benefits arising from use of PGRFA; right to participate in decision making at the national level in matter related to the conservation and sustainable use of PGRFA)? ["n/a" or describe; recommended max {300 words}]

As ILRI's mandate is mainly focused on livestock research, this section will highlight ILRI's practices in its livestock research requiring compliance with ABS issues such as prior informed consent, traditional knowledge, participation by communities and equitable benefit sharing, conservation and sustainable use. Similar practices are implemented for ILRI's plant genetics research activities. The forage gene bank practices have been covered under section 5.

**ILRI's Environment Occupational Health & Safety/Research Compliance (EOHS/RC) Unit (with support from the IP & L Unit)**, promotes the ethical and responsible conduct of research, by providing independent oversight in coordinating institution-wide research compliance. EOHS is responsible for the administration of ILRI's research compliance committees i.e. Institutional Research Ethics Committee (IREC), Institutional Animal Care and Use Committees (IACUC) and Institutional Biosafety Committee (IBC). EOHS/RC and the IP & L Unit works with and supports scientists to navigate the complex maze of international and local regulations that impact research undertaken by ILRI and its collaborators. All research projects at ILRI must submit and obtain approval and relevant permits for their research compliance prior to and during implementation of their research activities.

The IP & L Unit is a member of the IREC (and IACUC) committees. Through the IREC review process, legal and ABS compliance of all ILRI research projects is reviewed for compliance as follows:-

**Informed consent:** IREC has standard operation procedures (SOPs) on preparing adequate informed consent forms and Guidelines for Obtaining Informed

Consent. This typically begins with an introductory letter from ILRI to the local area head or representative, preparatory meetings through the head with community members to explain the research etc, use of various tools including pictorial representation of the research, expected outcomes, benefits to the community or the ILRI standard informed consent forms. Research permits are also sought (coordinated by EOHS) from the relevant authorities in Kenya (and other locations where ILRI operates), including the Department for Veterinary Services, National Environmental Management Authority, Kenya Wildlife Services, the National Commission for Science and Technology (NACOSTI) , Kenya Plant Health Inspectorate (KEPHIS) etc. prior to undertaking the research activities.

**Farmer participation, conservation and management:** Participation is ensured through the Consent guidelines - preparatory meetings, meetings with community members at various stages of the research, ensuring farmers and community members have workshops targeted at engagement, decision making and capacity building is encouraged.

**Traditional knowledge:** PIs and research teams are required in the compliance form to indicate if TK is intended to be used and are required to document and acknowledge the source and ownership of TK

**Equitable benefit sharing:** ILRI has so far not entered into any ABS agreements, but is currently (in 2017) negotiating an ABS agreement, MoU and MTA with the Kenya Wildlife Services and the National Museums of Kenya. These to be reported in the 2017 report.

**What kinds of agreements or projects does the Centre enter into with farmers, farming communities or organizations)? [“n/a” or describe; recommended max {300 words}]**

As described at D above; Memorandum of Understanding (MoUs), Material Transfer Agreements (MTAs), Standard Material Transfer Agreements (SMTAs), Access and benefit sharing agreements (ABS agreements), Collaborative Research Agreements and Research permits from relevant regulatory agencies in Kenya and other locations where ILRI operates.

**Other highlights relating to genetic resource management (e.g. concerning activities undertaken in 2016 or anticipated activities in 2017): [“n/a” or describe]**

**See Section 2 on developing an ABS (Access and Benefit Sharing) Standards or an ABS Policy, compliance and capacity building** through cooperation with the GIZ ABS Initiative;

**See Section 4 Plans to improve IP management practices** - Audit of ILRI’s research compliance requirements globally; Establishment of ABS practices and guidelines for ILRI; Establishment of ABS committee;

**See section 5 on the CIAT ILRI Joint Forage Genebank management** project;

**The IP and Legal Unit** is also keen to develop its capacity in ABS compliance issues and will identify and attend relevant trainings on ABS

6. Partnerships and dissemination pathways highlighting IA management practices

Identify **key dissemination pathways for Center outputs** according to the types of intellectual assets produced by the Center and briefly describe the underlying intellectual asset management practice/strategy used to maximize the global accessibility and impact of such intellectual assets: **[Describe; recommended max {500 words}]**

Extracted and summarized from the Livestock CRP proposal 2017-2022, please find key dissemination pathways from the Livestock CRP which ILRI leads:-

**Livestock CRP in brief:** The Livestock Agri-Food Systems CGIAR Research Program (the Livestock CRP) will provide research-based solutions to smallholder farmers, pastoralists and agro-pastoralists, together with the value chain actors who trade, process and deliver products to consumers to drive their transition to sustainable, resilient livelihoods and to productive small-scale enterprises that will help feed future generations

**Key dissemination pathways for the CRPs outputs :** See Addendum A attached at the end of this Report titled *“Livestock CRP intellectual assets and dissemination pathways”*

**Intellectual asset management strategy:** All core partners in the program are committed to the global accessibility of research outputs as international public goods (IPGs), as a way of broadening impact. The program will aim for a balance between maintaining global accessibility and achieving targeted impacts by using intellectual property rights (IPRs), licensing and other strategies to ensure that specific outcomes are reached through appropriate public, public-private or other partnerships. Each of the partners has its own policies and guidelines on the management of intellectual assets. Those of CGIAR partners conform to CGIAR principles and implementation guidelines. ILRI has incorporated these guidelines in the contractual arrangements to ensure compliance with CGIAR policies.

Given the range of partnerships required and the divergent intellectual-property (IP) ideologies between the private and public sector, developed and developing country partners, international laws and regulations and their implementation at country level, the program will apply the concept of intellectual asset (IA) management to align the various actions and actors with CGIAR principles.

At program and flagship level, IA management will: 1) advise and formulate appropriate and effective IP models for prompt and broad dissemination of research outputs consistent with CGIAR principles, 2) advise, identify and pursue IP protection when this supports the global access objectives, 3) develop and monitor IP and legal contracts for compliance, 4) as needed and subject to funds, support partner policy development and implementation in these areas, 5) report on these activities annually.

Identify new or ongoing **partnerships striving to maximize global accessibility and impact** with particular interest in public private partnerships, product development partnerships; consortium arrangements and other collaborations that involve strategic management of IAs (irrespective of whether such restrictions involve LEAs, RUAs, patents or PVPs): **[Describe; recommended max {500 words}]**

**The Africa Chicken Genetic Gains (ACGG) Project led by ILRI**

The ACGG is a BMGF-funded project (2015-2019) aimed at accessing, testing, adapting, and catalyzing public-private partnerships for multiplying and making

available well adapted low-input chickens for productivity growth in Nigeria, Ethiopia and Tanzania, through public-private partnerships. ACGG will achieve this through selecting and empowering more than 7,500 smallholder farmers (at least 70% of whom will be women carefully chosen from multiple agro-ecological zones), to conduct on-farm and on-station chicken germplasm testing to measure and demonstrate productivity, preference, income growth, and household consumption increase. ACGG will facilitate the development of the necessary public-private partnerships required to make available these farmer-tested genotypes.

**Project partners:** ACGG is led by ILRI and implemented by Wageningen University, PICO-EA (Institute for People, Innovation and Change in Organisations East Africa), TALIRI (Tanzania Livestock Research Institute), EIAR (Ethiopia Institute for Agricultural Research), and Obafemi Awolowo University and numerous research and development organizations in Nigeria, Ethiopia, and Tanzania.

**Strategic management of IA:**

- a) Reporting Project Intellectual Property. Sub-grantees will report all Project Intellectual Property at the start of the Project through the ACGG Background IP Due Diligence Form. Project IP shall in a timely manner be provided to ILRI with a complete written disclosure of the Project IP as it is developed. Genetic material to be accessed and used by the Sub-grantees must be acquired under appropriate MTAs, permits and authorisations executed by both parties and which have no restrictions on ownership of the research outputs by the Sub-grantees.
- b) Ownership of Background IP and Project Intellectual Property. Each party will continue to own all Background IP but each party agrees to license it to the other Parties in the Project to the extent such licenses are necessary to enable them to carry out the Project. In general, the parties will not supply or transfer any germplasm licensed to them through the Project to any third party, except as permitted or required to carry out the Project and the Project's agreements. Project IP ("Joint IP") shall vest jointly in the project partners equally as Joint Owners. Each Joint Owner shall have an automatic, perpetual world-wide, non-exclusive, royalty-free license including the right to sub-license, in and to the Joint IP, during and after the project while ensuring Global Access.
- c) Commercialization of Project Intellectual Property. The development and improvement of farmer-preferred lines and their multiplication, distribution, adoption, and maintenance of the genetic technologies through public-private partnership is a critical outcome of ACGG. During the multiplication phase, ACGG aims to collaborate closely with organizations with public-private partnership and commercialization expertise such as the African Agricultural Technology Foundation (AATF). In the event that a farmer-preferred strain is identified and improved, ILRI will facilitate and coordinate licensing so that ILRI, ACGG, and the in-country long-term genetic gain programs will specialize in the development of the technology, and when ready, this will allow for uptake of the technologies by companies. The Sub-grantee shall have the right to commercialize their own Project Intellectual Properties, however for Intellectual property generated jointly (Joint IP), then commercialisation of the Joint IP shall require to be carried out with the prior consent of the sub grantees. The Sub-grantee must submit for review a request in the form of a Commercialization Plan to and obtain prior written permission from the Project Leader at ILRI.
- d)

	<p>e) <u>Mechanisms for Assuring that Knowledge is Disseminated</u>. The Project has a website (<a href="http://www.africacgg.net">www.africacgg.net</a>), where all publications, reports, videos and training materials are linked and can be accessed will be posted. All digital copies of all information products, by all partners and sub-grantees, must be made available through ILRI's institutional repository on CGSpace. The Project will collaborate with other initiatives that will enhance awareness of the Project and its objectives and provide access to its outputs. There are eight distinct groups of end users the Project seeks to reach with different parts of the Project: 1) farmers, 2) development change agents, 3) private sector actors in the poultry value chain, 4) other private sector actors in relevant value chains (traders, agro-processors), 5) policy makers, 6) the scientific community, 7) donors, 8) investors/financers, and 8) the global community.</p> <p>f) <u>Anticipated Post-Project Development, Commercialization and Sustainability strategies</u>. All Project partners are required to inform ILRI, and through them the Donor, of any intention to commercialize products or ideas derived from Project IP developed through the Project.</p> <p>g) Each collaborating partner has signed the standard ILRI research contracts requiring that they comply with this Global Access Strategy. Distilled into actionable instructions and templates, it will ensure compliance with the global access requirement of the Bill &amp; Melinda Gates Foundation.</p> <p>h) The IP and L Unit supported the project in developing its Global Access Strategy document. This is a living document that continues to be monitored and updated as the Project progresses.</p> <p>Identify dissemination pathways or partnerships involving <b>incentives that are innovatively designed</b> (irrespective of whether such partnerships involve LEAs, RUAs, patents or PVPs)? [Yes/No]; [If Yes, briefly elaborate on partnership(s) and incentive(s); recommended max {500 words}]</p> <p>See above example of the ACGG Project.</p>
7.Public disclosures	<p><b>A. Key information</b> concerning each LEA and RUA reported in Part 2 of this 2016 IA Report has been <b>publically disclosed</b> and the CGIAR register of public disclosures (available <a href="#">here</a>)<sup>3</sup> is current up to at least 31 December 2016: [Yes/No]; [If No, briefly describe; recommended max {300 words}]</p> <p>Not applicable</p> <p><b>B. Public disclosures</b> recorded in the CGIAR register of public disclosures (i.e. pre 201[x-1]) are <b>verified as accessible</b> and have been developed/reviewed taking into consideration the disclosure recommendations provided by the Consortium Office<sup>4</sup>: [Yes/No]; [If No, briefly describe; recommended max {300 words}]</p> <p>- ILRI has complied with the public disclosure requirements of the IA Principles. In 2013 and 2014 ILRI reported on the Collaboration and License Agreement with Boehringer Ingelheim Vetmedica GmbH (BIV) for conducting a feasibility study for the development of Classical Swine Fever Virus (CSFV) vaccine. As reported, this collaboration however did not take off as the vaccine strains delivered by BIVs Chinese partner were dead on arrival and in addition the ILRI PI</p>

<sup>3</sup>This register is used to maintain the information contained in the publically accessible version of the register available at <http://www.cgiar.org/resources/cgiar-intellectual-asset-management/>

<sup>4</sup> See Q&A[A12] available [here]

	<p>responsible for the work left ILRI.</p> <p>- ILRI will provide a report and update on the KEVEVAPI license (please see section 3) in its 2017 IA report.</p>
8. Open access	<p><b>The Center's 2016 <a href="#">open access and data management update</a> (available <a href="#">here</a>) been submitted to the CGIAR Consortium by the Center's Knowledge Manager and/or Data Manager: [Yes/No]; [If No, please annex the update to this report or provide brief comments concerning status and an anticipated date of submission; recommended max {150 words}]</b></p> <p>NO the report was not submitted to the CGIAR Consortium, it will be submitted in 2017.</p> <p>ILRI continued to implement open access and research data management in line with its policies (see <a href="https://www.ilri.org/open">https://www.ilri.org/open</a>).</p> <p>In early 2016, ILRI started to use the 'Creative Commons Attribution 4.0 International License' on all its information products (<a href="https://www.ilri.org/CopyRight">https://www.ilri.org/CopyRight</a>). This change (from non-commercial, attribution) recognized that several of our funders require very open, also commercial use, licenses and thus having a standard very open license was the optimum approach for ILRI. It was rolled out in early 2016.</p> <p>CGSpace continues to be the primary open access 'repository' and publishing tool for ILRI. Of the 769 items published in 2016 and so far recorded in CGSpace, 85% are open access. Globally, ILRI information products in CGSpace received 4.7 million views and downloads. The approach and experience was written up in late 2016 and submitted to the KM4Dev Journal as part of a special issue on information and knowledge management, ILRI also makes its formal publications available through Google Books, 100% downloadable. In 2016, these books (in total) had 2.26 million views.</p> <p>The ILRI data portal (<a href="http://data.ilri.org/portal">http://data.ilri.org/portal</a>) currently stores an inter-operable repository of 159 datasets covering both ILRI and partner research activities. The growth of this portal has been slow due to lack of resources in 2016 and currently prioritisation is given to projects that utilise mobile data collection technology, need to link datasets together for analyses and/or are required to submit the data to the repository under donor or publisher requirements. Plans for 2017 include development of the portal to provide more user statistics and potentially to utilise DOI permanent links (although this requires investment). The ILRI tools portal (<a href="http://data.ilri.org/tools">http://data.ilri.org/tools</a>) also continues to grow slowly hosting 57 tools, or links to tools, for ILRI and partner projects, mainly through the Livestock and Fish and Humidtropics CRP. One output from the Humidtropics CRP in 2016 was to develop a more user-friendly frontend and improved meta-data for these tools, the work on this is ongoing. ILRI's Git Hub (<a href="http://github.com/ILRI">http://github.com/ILRI</a>) continues to be the main repository for sharing software and code products.</p>



## 9. CRPs

A. Lead Centers to provide a brief overview of intellectual assets management at CRP level which addresses the following as relevant: [**“n/a” or describe; recommended max {1000 words}**]

- Capacity and staffing
- IP governance and oversight mechanisms,
- policies and/or guidelines,
- committees, focal points, communities of practice, annual meetings, workshops,
- implementation tools and templates etc. relating to IA management.

Please note capacity and staffing, policies and/or guidelines, implementation tools and templates are already covered under sections 1 and 2.

**IP governance and oversight mechanisms:** All core partners of the Livestock CRP are committed to the global accessibility of research outputs as IPGs, as a way of broadening impact. The program will aim for a balance between maintaining global accessibility and achieving targeted impacts by using intellectual property rights (IPRs), licensing and other strategies to ensure that specific outcomes are reached through appropriate public, public–private or other partnerships. Each of the partners has its own policies and guidelines on the management of intellectual assets. Those of CGIAR partners conform to CGIAR principles and implementation guidelines. As lead centre, ILRI has incorporated these guidelines in the contractual arrangements and ensure compliance with CGIAR policies.

- Given the range of partnerships required and the divergent intellectual-property (IP) ideologies between the private and public sector, developed and developing country partners, international laws and regulations and their implementation at country level, the program will apply the concept of intellectual asset (IA) management to align the various actions and actors with CGIAR principles.
- At program and flagship level, IA management will: 1) advise and formulate appropriate and effective IP models for prompt and broad dissemination of research outputs consistent with CGIAR principles, 2) advise, identify and pursue IP protection when this supports the global access objectives, 3) develop and monitor IP and legal contracts for compliance, 4) as needed and subject to funds, support partner policy development and implementation in these areas, 5) report on these activities annually.
- The CRP management unit works with the IP & L unit and IP focal points or Managers of other CGIAR Centres and collaborating partners, along with other support units across ILRI to coordinate IA management, together with related open access, data management and communication activities.

B. Comments by Centres as an implementing partner for CRP(s), if any: [**“n/a” or describe; recommended max {500 words}**] NONE

<p>10. Evidence building: borderline agreements, grey areas and challenges implementing the IA Principles</p>	<p><b>Borderline agreements reported for the purpose of evidence building:</b></p> <p>Did the Center enter into agreements concerning the <b>procurement or provision of product and/or services</b> involving outputs which cannot be promptly and broadly disseminated and which are not reported as LEAs or RUAs : <b>[“n/a” or briefly describe; no word limit]</b></p> <p>NOT APPLICABLE</p> <p>Did the Center enter into grant agreements or collaboration <b>agreements in which the prompt and broad dissemination of outputs is limited or conditional but a reasonable expectation exists</b> that such dissemination will occur? <b>[“n/a” or briefly describe; no word limit]</b></p> <p>NOT APPLICABLE</p> <p>Did the Center enter into collaboration agreements granting <b>exclusivity or priority access over outputs or which otherwise restrict global access</b> to outputs (i.e. the Center does not have a right to promptly and broadly disseminate) but which do not qualify as RUAs or LEAs and have not been reported in B or C above: <b>[“n/a” or briefly describe; no word limit]</b></p> <p>NOT APPLICABLE</p> <p><b>Perceived grey areas and challenges experienced</b></p> <p>Any agreements the Centre could not conclude because of, or predominantly because of, the IA Principles? <b>[“n/a” or briefly describe; no word limit]</b></p> <p>NO, but also see section 3 regarding the exclusive license to be granted to KEVEVAPI.</p> <p>Re negotiating or structuring non-disclosure agreements, confidentiality clauses or other agreements restricting prompt and broad dissemination: <b>[“n/a” or briefly describe; no word limit]</b></p> <p>NO</p> <p>Re negotiating or structuring LEAs, including deviation requests: <b>/[“n/a” or briefly describe; no word limit]</b></p> <p>NO</p> <p>Re negotiating or structuring RUAs: <b>[“n/a” or briefly describe; no word limit]</b></p> <p>NO</p> <p>Re negotiating or structuring agreements to deal with IP applications (trademarks, patents, PVPs):</p> <p>Yes please see section 3</p> <p>Re negotiating or structuring service or procurement agreements (Center as provider): <b>[“n/a” or describe; no word limit]</b></p> <p>NO</p>
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	<p>Re negotiating or structuring service or procurement agreements (Center as recipient): ["n/a" or describe; no word limit]</p> <p>NO</p> <p>Re other <b>negotiations</b> with partners: ["n/a" or describe; no word limit]</p> <p>NO</p> <p>Other grey areas or challenges the Center wishes to highlight?: ["n/a" or describe; no word limit]</p> <p>Please see section 4 on challenges</p>
11. Other	<p><b>Other Center highlights, trends, cases studies, etc. related to intellectual assets management:</b> ["n/a" or describe; no word limit]</p> <p>Highlights, trends and case studies as already highlighted in this Report.</p>

Addendum A: Livestock CRP intellectual assets and dissemination pathways (Note that these also apply to ILRI livestock research)			
Intellectual asset	Dissemination and impact pathways	Activities	Examples
Information products (publications, multimedia, reports, manuals, learning materials)	Open access repositories Data repositories and databases Open educational resources	Repositories, standards, taxonomies for sharing and re-use Use of global open licenses Agreements with third party publishers Open access support for authors	CGSpace repository learning.ilri.org open access learning platform Africa RISING data portal FEAST online aggregator
Data, datasets, databases, models	Open licences Adapted IP rights Partnerships Capacity development Targeted dissemination, translation and adaptation to specific groups (policy makers, farmers, etc)	IPR management strategies and advice Legal advice Communication and engagement: publishing, media outreach, use of social media Use of ICTs (phones, video, radio, etc) Workshops, engagement processes, conferences etc	Ng'ombe Planner  Tropical forages selection tool: <a href="http://www.tropicalforages.info">www.tropicalforages.info</a>
Software and applications			
Know-how (protocols, how-to guides, toolkits, learning and training, best practices, Institutional arrangements)	Science communication Development communication Participatory research and innovation platforms Scaling through partners		

Germplasm	Utilization PPPs  Participatory development IP rights and licenses International treaties National laws Capacity development	Licenses and agreements to access and give access to germplasm, including SMTA/MTAs; Legal advice Databases and data dissemination Open access repositories Svalbard storage	CIAT forages collection: <a href="http://isa.ciat.cgiar.org/urg/foragecollection.do">isa.ciat.cgiar.org/urg/foragecollection.do</a>
Biological materials, samples, pathogens	Public access biorepository	Dissemination strategies	<a href="http://azizi.ilri.org/">http://azizi.ilri.org/</a>
Financial products	Public–private partnerships Scaling through partnerships	Legal advice Dissemination strategies Capacity development	
Vaccines and diagnostics	Private sector Public–private partnerships	Legal advice Freedom to operate opinions Dissemination strategies	
Improved livestock breeds and cross-breeds and platforms underpinning genetic improvement	Public–private partnerships Multiplication, delivery and scaling through partnerships Gene-edited livestock	Databases of breeds and traits Training resources and capacity development Legal advice Informing public opinion	<a href="http://dagris.info/">http://dagris.info/</a>  <a href="http://agtr.ilri.cgiar.org/">http://agtr.ilri.cgiar.org/</a>
Improved bred grass cultivars	Public–private partnerships	Legal advice Contracts and agreements Royalty sharing	Livestock Feeds and Forages flagship

Community and farmer knowledge	Participatory research Value chain development Livelihood systems development	Ethical standards Farmer rights Use of traditional and community knowledge Prior Informed Consent Legal advice Dissemination strategies Innovation platforms Participatory communication and social learning	Innovation platform briefs: <a href="https://cgspace.cgiar.org/handle/10568/336">cgspace.cgiar.org/handle/10568/336</a> 67  Africa RISING engagement standards: <a href="https://cgspace.cgiar.org/handle/10568/348">cgspace.cgiar.org/handle/10568/348</a> 30
Genomic tools, forage crop ontologies, and phenotyping platforms	Open access publications		

<p>DNA, RNA, enzymatic and analytical methods and processes for use in biotechnology discovery and/or trait development, including but not limited to transformation tools and methods, promoters, proteomics, introns, enhancers, genome editing, DNA and RNA modification tools etc</p>	<p>Public sequence databases Research partnerships</p>	<p>Legal advice Databases and data dissemination Access to third party technologies Freedom to operate opinions Use of patents Dissemination strategies</p>	<p>Livestock Genetics flagship</p>
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Annex 1: Intellectual asset management practices survey – ILRI \*Please note that this Annex will be completed and provided as a separate file.

**Signed by ILRI this 28th day of February 2017**

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Jimmy Smith  
**Director General**