

**IITA IA Report for 2014**

| <b>I. General information regarding the implementation of the CGIAR IA Principles during the preceding year (NOT CONFIDENTIAL)</b> |  |
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| 1. Legal/IP capacity at the Center;  | <p>Front line staff dealing with IP in 2014 were:</p> <ul style="list-style-type: none"> <li>• Ms. Hilde Koper-Limbourg, Head Project Administration Office</li> <li>• Ms. Lucy Omidiran, HR Manager</li> <li>• Ms. Morenike Abu, Contract Compliance Officer</li> <li>• Ms. Ememobong Nkana, Project Documentation Officer</li> </ul> <p>In addition to their other responsibilities in their functions at the International Institute of Tropical Agriculture (IITA), the above mentioned fulltime employed staff constitute the IITA IP team and they focus on the implementation of and compliance with all IP &amp; IA Principles. Hilde has degrees in Tropical Agriculture and Human Resource Development, experience with legal issues relating to agreements for more than 7 years, and had IP training over the last 4 years. Lucy has degrees in Social Policy and Administration and Law. Morenike and Ememobong both have legal backgrounds and law degrees. Morenike was recruited in 2013 to strengthen the team.</p> <p>The IITA IP Team is progressively improving its efforts on creating awareness, implementing, and ensuring compliance with IP/IA Principles.</p> <p>Dr. Sean Butler, Fellow and Director of Studies in Law at St Edmund's College, Cambridge, has been engaged to provide advice and support on IA/IP issues to IITA. He is on a continued consultancy contract with IITA and has also worked with the Consortium and with other CGIAR Centers. He provided training to the IITA IP team, scientists and other relevant IITA staff through a visit to IITA from 26-30 May 2014 and through a workshop in Cambridge from 23-26 June 2014, in which both Lucy and Hilde participated.</p> <p>Hilde also participated in the CGIAR Consortium Office IP Focal point meeting in Mexico from 30 June to 3 July 2014.</p> <p>In 2015 a two week IP training by Dr. Butler in Cambridge is planned, for Morenike from 16 to 27 February, and Hilde will participate in further training in Cambridge in June. Hilde will also participate in the CGIAR Consortium Office IP Focal Point meeting planned for July 2015.</p> <p>On general legal capacity, Morenike's recruitment has strengthened the capacity within IITA. IITA also makes use of lawyers at Headquarters in Ibadan, Nigeria, and in the Hubs and stations on a retainer basis to assist and advise on all legal matters when necessary. Where they have no expertise on a matter under discussion they procure external experts as may be required.</p> <p>IITA Management is happy with the increasing Legal/IP capacity of the front line team and considered this sufficient for its needs during 2014; there are no plans to change this during 2015.</p> |
| 2. Any new or updated IP – related policies  | <p>IITA's IP policy, which is fully in line with, and based on, the CGIAR IA Principles, has been the guiding principle upon which IITA is ensuring compliance with the CGIAR overall Principles.</p> <p>IITA's Board of Trustees approved the IP policy on 28 November 2012. The IP Policy was attached to IITA's 2012 report and is made available on IITA's website (<a href="http://www.iita.org/intellectual-property">http://www.iita.org/intellectual-property</a>).</p>  |

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|  | <p>IITA's IP Policy will be reviewed and updated when the CGIAR IA Principles are amended and when otherwise necessary. During the review of IP reporting by IITA Internal Audit in March 2014, the IITA Internal Auditors recommend that 'there is a need to include the definition of Intellectual Asset and Intellectual Property in the Institute's IA policy as part of on-going revision'. This will be done when IITA's IP Policy is updated in line with possible future amendments to the CGIAR IA Principles.</p>   |
| <p>3. Center's updated IP portfolio (containing at a minimum all IP Rights registered by the Center, or by third parties working with or on behalf of Centers; e.g. trademarks, patents, plant variety rights)</p> | <p>IITA did not register any IP rights such as patents or plant variety rights in 2014. Information on product registration and trademarks granted is provided below.</p> <p>IITA regards the results of its research as international public goods and would only register IP if it would help to maximize their impact on the target beneficiaries (i.e., the small farmers and the poor).</p> <p><b>Aflatoxin biocontrol product registration</b></p> <p>From 2012 to 2014, in meetings with Kenyan stakeholders, it was decided that Kenya Agriculture and Livestock Research Organization (KALRO) would be the registrant of the aflatoxin biocontrol product in Kenya, named Aflasafe KE01™. Accordingly, IITA assisted with preparing the paperwork for registration and submitted the registration dossier to the Pest Control Research Board (PCPB) for seeking registration of the product in the name of KALRO. PCPB granted temporary registration for one year to the product to gather some toxicological and eco-toxicological data. IITA and the United States Department of Agriculture – Agricultural Research Service (USDA-ARS) developed the plans for a modular manufacturing process of aflasafe. Ground-breaking for the construction of a modular manufacturing plant was performed by the Cabinet Secretary of the Ministry of Agriculture on 11 November 2014 in KARLO-Katumani. IITA will build the manufacturing facility on a turnkey basis and expects to hand it over to KARLO in 2015.</p> <p>The Nigerian regulator National Agency for Food and Drugs Administration and Control (NAFDAC) granted full registration to Aflasafe™ on 7 November 2014. The registrant is IITA. The full registration ownership of Aflasafe™ by IITA now enables IITA to develop options for commercialization of the product. IITA has established a high throughput manufacturing trial factory with the capacity to produce 5 tons of aflasafe per hour. Expressions of Interest were received from various organizations to either lease the factory or establish a distribution and marketing relationship or manufacture/distribute/marketing function. Two agreements were drafted but no further development has taken place yet. IITA manufactured 135 tons of aflasafe and sold nearly 100 tons of aflasafe to farmers and for other projects. Funds received from sales of Aflasafe™ are used to run the factory and any remaining funds are reinvested into research.</p> |
| <p>4. Any relevant information showing that the requirements laid down in Article 5 of the CGIAR IA Principles have been met</p>   | <p>IITA is fully committed to the statements contained in Article 5 of the CGIAR Principles and this has been formulated and adopted into our IP policy. IITA is gearing up towards getting everyone in its Center to fully understand the IA Principles and its importance.</p> <p>Since the first review by IP intern Ally Smith in 2011 of all Agreements, Memoranda of Understanding (MoUs), and other legal and IA/IP documents signed by IITA, we have ensured that all IA Principles are taken into cognizance when new Agreements are being drafted, negotiated and signed. We continued the review, which for 2014 was carried out internally by the IITA IP team, as well as by IP Consultant Dr. Butler.</p> <p>All agreements signed by IITA are uploaded in a project database called ProMIS, and filed in a paper filing system. The IA/IP review of IA/IP clauses in agreements mentioned above is kept in the form of a spreadsheet and regularly updated.</p>  |

An IA Compliance Procedure (for Board Monitoring) drafted during 2013, was approved by IITA's Board of Trustees in November 2013, to further showcase its 100% commitment to achieving full compliance with the IA Principles. The Board also requested IITA's Internal Audit to review IITA's IA compliance to support the Board's assurance statement. The review of 2013 was carried out in March 2014 by using the CGIAR Consortium legal unit's provided 'Checklist of main Center obligations under the CGIAR Principles on the Management of Intellectual Assets (Principles) and their Implementation Guidelines (IG)'. The review concluded that (i) the Institute had complied with the CGIAR IA Principles and had put in place a mechanism for ensuring IP related transactions are centrally captured, and that (ii) reports prepared for the consortium are adequately supported and the CGIAR IA Principles have been complied with. The review further recommended that there (i) is a need to include the definition of Intellectual Asset and Intellectual Property in the Institute's IA policy as part of on-going revision, and (ii) an IA (project) audit should be conducted. Based on the report submitted and the review, IITA's Board submitted its Assurances of Compliance with the CGIAR IA Principles for 2013, in April 2014.

In relation to the second recommendation of IITA's Internal Auditors review of IA Compliance, that an IA (project) audit should be conducted, the IITA IP team has started the introduction of an IP register. It is planned that by 1 January 2016, for all active projects by that time, IITA has a register of project IP. The purpose of this register is for IITA to have a better understanding of the Intellectual Property (IP) that is part of - or generated by - a project.

A form (attached as Annex 1) was developed to gather this information. The form is in three parts: the first two parts to be completed at the start of a project, the last one when the project has been completed:

- Background inventory asks about the IP that will have to be acquired to carry out the project - it could be freely available, or may need to be obtained from somewhere under an Material Transfer Agreement (MTA);
- Expected IP Outcomes ask about what IP is expected to come from the project - it could be data, know-how, germplasm, varieties, or a combination of these;
- IP Outcomes (to be completed at the end of the project) are in the same form as Expected IP Outcomes, and ask about the actual types of IP that were generated.

IITA carefully and thoroughly negotiates favorable terms in its Agreements to ensure that both IITA & third parties comply with the terms in the Agreement.

IITA staff and consultancy contracts include a statement mentioning that the person signing the statement agrees that IITA maintains all custody of IA disclosed before, during and after the period of his/her contract.

New plant varieties are released through national partners; record of all these new plant varieties released in 2014 is with the Director for Western Africa and Project Administration Office. A total of 26 new crop varieties were released during the year in Liberia, Mali, Nigeria and Sierra Leone respectively. Attached as Annex 2 is a detailed table of these new varieties.

Disclosure of inventions and other research results are in place through intranet, lectures, meetings, presentations, publications, reports, etc. IITA joined GENESYS, an online portal and database that provides information about gene bank accessions to facilitate their use.

IITA signed no (0) Limited Exclusivity Agreements (LEA) in 2014, and signed one (1) Restricted Use Agreement (RUA) made up of a supply agreement with two Statements of Work (which is reported below under part II). No (0) IP applications were made. IITA did sign some agreements that, after information from and discussions with and through review by the CGIAR CO legal team, were considered to 'test the boundaries' of the

LEA/RUA but were determined not to qualify as such. To contribute to the discussion on this and the future review and possible amendments of the CGIAR IA principles, IITA has agreed to report these agreements under Section 1 Part 5 of this report.

5. Any relevant highlights, trends, cases studies, practices etc. that the Center would like to show case or share

#### **Genetic Resources Centre (GRC, Genebank)**

IITA's Genetic Resources Centre (GRC, Genebank) is managed by Michael Abberton, who works with a team of qualified Genebank staff. GRC houses important international collections of the staple crops of sub-Saharan Africa. IITA is part of the network of other CGIAR Genebanks and attends annual meetings with other Genebank Managers as part of the Genebank CRP management process. Distribution of accessions for breeding and research in connection with food and agriculture is carried out using the SMTA and GRC also conserves and distributes breeding lines from the breeding programmes of IITA, using the SMTA where appropriate.

GRC collaborates with and provides assistance to NARS Genebanks e.g. as safety duplication centre for many national Genebanks to safeguard their collections. Safety duplication of the GRC collections is carried out at the Africa Rice facility in Benin for cassava and yam and at CIMMYT (for maize), CIAT for legumes (under a new agreement in 2014), and the Global Seed Vault at Svalbard for all seed crops.

GRC plays an important role with respect to training and capacity development including many staff from NARS, particularly in 2014 the National Root Crops Research Institute, Nigeria (NRCRI), who are being trained on Genebank processes at GRC (incl. seed bank and *in vitro* bank).

#### **International Treaty for Plant Genetic Resources for Food and Agriculture**

IITA adheres to the International Treaty for Plant Genetic Resources for Food and Agriculture (PGRFA), and uses it as the basis for regulating its collections. IITA has used the Standard Material Transfer Agreement ("SMTA") for transfer of PGRFA when required and has appropriately reported all transfers of PGRFA made using the SMTA to the Governing Body of the Treaty.

IITA concluded 97 SMTAs in 2014, and had reported all by end February 2015. On the reporting of SMTAs, IITA had a backlog of SMTAs not yet reported to the Governing Body of the Treaty. This backlog was cleared in the last week of February 2015. IITA recently switched to the 'Easy-SMTA' system in which reporting to the Governing Body is 'automatic'. It is expected that this system will speed up our reporting obligations.

IITA follows the procedures for the crops in Annex 1 of the Treaty, even for crops not mentioned in the Annex. Almost the entire germplasm collection is designated as global public goods under Article 15 of the Treaty and placed into the multilateral system, which provides access and benefit sharing for using the PGR for food security. For crops not in Annex 1 of the Treaty, where partners are not comfortable with an SMTA, IITA signs MTAs. MTAs are also used for exchange of DNA, biopesticides etc.

#### **IA/IP Management in Humidtropics, a CGIAR Research Program - led by IITA**

IITA follows CGIAR IA Principles under Humidtropics (and all the other CGIAR Research Programs and window 3 and bilateral projects) by communicating, sharing and explaining these to IITA's scientists and other staff involved in Humidtropics. Partner agreements include clauses and statements on IA/IP related matters to promote compliance.

Humidtropics has a website (<http://humidtropics.cgiar.org>) and uses an online internal collaboration site and repository based on Alfresco

Community Edition 5.0c (Open Source) on a Humidtropics cloud server located in the UK and remotely managed by IITA's Head of ICT. This is used for partner communication, collaboration and document repositing of content (pictures, pdfs, word, spreadsheets, data etc.). It recently made parts that should be in the public domain, available as open access on the website.

Humidtropics website also has copyright and disclaimer information (<http://humidtropics.cgiar.org/about-2/copyright-disclaimer/>). The Copyright & Disclaimer page contains a requirement for attribution. When it is noticed that attribution is not done, and when it would potentially damage the program in one way or the other, taking the necessary actions to rectify this would be considered.

Humidtropics open access products can be accessed at <http://humidtropics.cgiar.org/openaccess/>.

### **E-Research Roadmap/ Platform**

- Progress has been made to improve the management of data and information to comply with CGIAR's Open Access Policy:
- Data management audits have been undertaken in units and a plan to work with hubs on data and information management has been developed.
- Progress has been made in moving to online forms, e.g. an online Expense Claim Form has been developed in line with IITA strategic initiative of full electronic processes of its business activities, an Online Transaction Database for the Farm Office Operations.
- A new training database is being tested. The database contains data on training activities and programs as well as on trainees.
- A new database for HR is also being developed to replace the existing system.
- Facelift of the website is ongoing.
- Partnership database is at the final stage of development.
- MS SharePoint, a web-based platform, which will support scientists and other IITA staff in their research to create team workspace, foster collaboration among scientists no matter their location, develop and share documents simultaneously - co-authoring, versioning, check in/checkout is also being deployed.
- New staff have been recruited to manage key scientific data and information, including bioinformatician, database managers for the breeding platform, the cassavabase and the genetic resources.

### **Public Private partnerships in relation to IA Compliance**

IITA is keen to work with the private sector through public-private partnerships to maximize impact in furtherance of CGIAR's vision to reduce poverty and hunger, improve human health and nutrition, and enhance ecosystem resilience through high-quality international agricultural research, partnership and leadership. IITA has developed various strategies for working with the private sector; like their Public-Private Partnership strategy and the Business Incubation Platform.

Not-for-profit entities such as IITA can attain synergies with the private sector through appropriate Public-Private Partnerships (PPPs). IITA recognizes that the experiences and resources of the private sector can offer new opportunities for its clients, partners, stakeholders and beneficiaries; however, its desire to engage more closely with the private sector is paralleled by concerns of unclear or incompatible private sector business motives, in particular related to the agenda setting of corporate and profit oriented multi-national stakeholders, and can also bring issues for IA Compliance.

In 2014, IITA developed guidelines for PPPs, setting out some of the key IA principles and related elements that need to be taken into consideration when working with the private sector. These guidelines (attached as Annex 3) are shared with private sector companies, when collaboration with IITA

is getting to the stage of signing an agreement to provide clarity and to assist with agreement negotiations. IITA is also in the process of developing a Private Sector Engagement/ Partnership Policy.

**‘Borderline’ LEA/RUA Agreements: Agreements that are testing the boundaries of the LEA/RUA**

During 2014, IITA signed some agreements that were interpreted by IITA IP team and consultant, according to the IA principles, to be LEAs or RUAs, but after review by the CGIAR CO legal unit were not considered to be an LEA or RUA, but are testing the boundaries of the understanding of those. IITA has agreed to report these under this section, as requested by the CGIAR CO legal team, to contribute to the discussion on this and the future review and possible amendments of the IA principles.

(1) One such agreement was an evaluation arrangement, which is not designed to result in ‘products and services’ or which does not otherwise incorporate the third party IA into the results generated by the Center (and hence potentially deemed not to qualify as RUAs) but in respect of which other restrictions may attach to the use of the intellectual assets acquired from a third party (e.g. dissemination of results subject to confidentiality obligations, prior approval or delay).

The agreement was signed between Primlaks Nigeria Limited and her associated Companies (PRIMLAKS) of 16, Kofo Abayomi Street Victoria Island, Lagos, Nigeria and IITA for ‘Yam Varieties for Food Industry in Nigeria - Industrial Trials’. The agreement was signed, and became effective on 18 June 2014 and is valid for a year, subject to an additional one (1) year renewal for phase 2 upon agreement by the Parties.

The objectives of this Agreement are (i) to select varieties of yam with sensory characteristics and suitable for processing as industrial food products and (ii) to produce planting material of the evaluated clones for the next phase which in turn will contribute to improved human health and nutrition, is in line with the policy of the Nigerian Government to substitute imported products with local products such as cassava and yam, and will enable farmers to grow selected yam varieties for the production of food products, thereby providing the farmers with a market. The goal of this Agreement is focused on improving people’s lives through food crops and products, while benefiting farmers who can grow yam varieties for which there is a market.

The restriction in the agreement is that IITA shall not disclose, under a five (5) year limited exclusivity, starting from the date of signing this Agreement, the names of the varieties provided to PRIMLAKS under this Agreement and the report submitted to PRIMLAKS. Notwithstanding this Agreement, the limited exclusive information shall remain available (i) for non-commercial research conducted by public sector organizations in furtherance of the CGIAR vision and (ii) in the event of a national or regional Food Security Emergency for the duration of the emergency. The limited exclusivity is for the field of use as per the title and objective of this agreement: the yam food products industry. After the five (5) year period the results shall be made accessible to the public throughout the developing countries of the world ("Global Access").

This was observed not to be an LEA by the CGIAR Consortium legal team because of the following reasons:

(1) IITA is not providing the yam varieties to PRIMLAKS on an exclusive basis. Nothing in the agreement restricts IITA from providing those same yam varieties to any other entity for any purpose.

(2) According to the agreement the varieties will be provided to PRIMLAKS for purposes of conducting evaluation trials and not for commercialization purposes. Indeed the FC IP Group and the Consortium agreed that agreements for conducting evaluation trials are not LEAs or RUAs.

(3) The confidentiality restriction requires that IITA shall not disclose for a 5 year period from the date of signing this Agreement, the names of the

yam varieties provided to PRIMLAKS and the Report submitted to PRIMLAKS. The confidentiality restriction does not prevent IITA from using those same yam varieties provided to PRIMLAKS or providing them to any other entity for any purpose. The confidentiality requirement only prevents IITA from disclosing the names of the varieties as well as the trial results report which affects prompt dissemination of research results as required under Art. 6.1 of the CGIAR IA Principles. This confidentiality requirement is necessary to protect PRIMLAK's legitimate commercialization interests.

The result of these observations is that this agreement is not a LEA within the meaning of Art. 6.2 of the CGIAR IA Principles which provides that "the Centers may grant limited exclusivity for commercialization of the respective Intellectual Assets they produce..." The agreement complies with the CGIAR IA Principles. That said, the CGIAR Consortium legal team found it commendable that the Agreement contains explicit provisions for research and emergency exemptions. It commended IITA for communicating key information on this agreement publicly in fulfillment of the public disclosure requirement. Key information regarding this LEA has been made publicly available through IITA's website (<http://bit.ly/1itzSdB>).

(2.) The other agreements were arrangements whereby a partner/donor obtains IP ownership in regards to intellectual assets produced or co-produced by a Center (and hence potentially deemed not to qualify as LEAs) in respect of which the partner possesses a right, whether limited or unlimited, to commercialize the intellectual asset or to use it for research and/or commercial purposes to the exclusion of others, whether such rights arise expressly or implicitly from the restrictions which apply to the resulting intellectual assets (e.g. dissemination of results subject to confidentiality obligations, prior approval or delay) and irrespective of whether certain non-commercial rights are reserved (e.g. research and/or emergency use rights by the Center or other third parties).

IITA signed some agreements in 2014, falling into this category:

- There is joint ownership, but it is not clear what each party is free to do with its rights.
- There is joint ownership, free right to publish, but subject to consent. Given the nature of the funder, consent is likely to be given.
- Results belong to donor, but may be published/used with their consent. The nature of the donor, and what is said in the contract, makes it likely that IITA can use them freely.
- The IP clause is somewhat ambiguous or unclear; results are shared but need consent from the donor before use or release. The nature of the donor means that it is unlikely that they will refuse consent to a request from IITA.
- Although there is a '*proces verbal*' document mentioning that the results are jointly owned and each party is free to use these, amending the agreement, modifications require approval from the donor (the World Bank) and there is no evidence of approval. De facto there is joint ownership, but the legal documents do not support this. However, given the nature of the donor, results will be made public.

As most of the organizations we signed the above agreements with are government or international public organizations, the nature of these organizations will make it likely that (i) results will be made public/ 'Global Access' by them, and (ii) IITA would not be refused consent as publishing results or new 'inventions' would also be to their benefit. It would be preferable to be able to negotiate a more compliant IP clause with these organizations (e.g. joint ownership with each party having the right to do with results as desired), but often these governments or international organizations have standard agreement templates that they are very reluctant or even unwilling to change.

**II. Information regarding each Limited Exclusivity Agreement, Restricted Use Agreement and IP Application that was concluded/made during the preceding year (CONFIDENTIAL, unless marked as non-confidential by the Center which is strongly encouraged as per Article 10.4 of the CGIAR IA Principles)**

**A. Limited Exclusivity Agreements (LEAs)**

NA

**A. Restricted Use Agreements (RUAs):**

| <b>RUA 1:[Title of RUA]</b>  |  |
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| <p>1. <b>General information:</b><br/>Indicate <u>title</u> of the agreement; name and address of contracting <u>parties</u>; <u>date</u> of conclusion of the agreement (and its effective date if different) and the <u>duration</u> of the agreement;</p> | <p><b>Title of Agreement:</b> ‘Supply Agreement between Syngenta Crop Protection AG and International Institute of Tropical Agriculture’, with two Statements of Work titled: (i) ‘Local Agreement between Syngenta Nigeria Ltd. and International Institute of Tropical Agriculture relating to and incorporating the Supply Agreement between Syngenta Crop Protection AG and International Institute of Tropical Agriculture dated April 2<sup>nd</sup> 2014 reference no. IITA-MAS-Trial services (the “Supply Agreement”) as an integral part’, and (ii) ‘Local Agreement between Syngenta Nigeria Ltd. and International Institute of Tropical Agriculture’ relating to and incorporating the Supply Agreement between Syngenta Crop Protection AG and International Institute of Tropical Agriculture dated April 2<sup>nd</sup> 2014 reference no. IITA-MAS-Trial Services_Training Program (the “Supply Agreement”) as an integral part’.</p> <p><b>Name and Address of Contracting Parties:</b> Syngenta Nigeria Ltd under the aegis of Syngenta Crop Protection AG located at Schwarzwaldallee 215, CH-4002 Basel, Switzerland and International Institute of Tropical Agriculture, London office located at Carolyn House, 26 Dingwall Road, Croydon, CR9 3EE, U.K.</p> <p><b>Date of Conclusion of the Agreement (and its effective date if different):</b> Its effective date is 2<sup>nd</sup> April 2014 and its date of conclusion (signing) is 14 June 2014.</p> <p><b>Duration of Agreement:</b> Three years; and shall expire on 31<sup>st</sup> December 2017.</p>  |
| <p>2. <b>Description of the project to which the agreement relates, including its purpose and the third party intellectual assets that are acquired and used under the agreement</b></p>   | <p><b>Description of the project:</b> The Supply Agreement, with its two SOWs, is related to the IITA project activities titled (i) ‘Evaluation and Screening of Syngenta Maize and Vegetable Hybrids for Adaptation in Nigeria’ and (ii) ‘Skills Development program for Syngenta Staff and Partners’. The project’s goal is to make quality seeds of adapted Syngenta maize and vegetable hybrids and appropriate cost-effective production packages available to, and used by farmers to improve their maize and vegetable production in Nigeria. Under this project, use is made of IITA’s facilities and expertise to evaluate Syngenta maize and vegetable hybrids, select adapted superior hybrids for cultivation and develop appropriate protocols for production of crops of interest to Syngenta in Nigeria.</p> <p>Project’s specific objectives are:</p> <p>(i)</p> <ul style="list-style-type: none"> <li>• To use IITA variety testing site in Zaria, Kaduna State and other facilities to evaluate/ screen Syngenta maize hybrids for adaptation and high yield potential in Nigeria.</li> <li>• To identify, lease and use suitable test sites in Kano and Oyo States to evaluate/ screen Syngenta tomato, sweet pepper and cabbage hybrids for adaptation and high yield potential in Nigeria.</li> <li>• To co-develop and implement protocols for crop production programs for maize and vegetables in collaboration with relevant international agricultural research institutions and the Nigerian National Agricultural Research System (NARS).</li> </ul> <p>(ii)</p> <ul style="list-style-type: none"> <li>• To train new staff and implementation partners on best agronomic practices for maize and vegetables.</li> <li>• To provide discipline-specific and/or customized training to staff and</li> </ul> |

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|  | <p>partners through short training and coaching programs.</p> <p><b>Purpose of the project:</b> is to make quality seeds of adapted Syngenta maize and vegetable hybrids and appropriate cost-effective production packages available to, and used by farmers to improve their maize and vegetable production in Nigeria.</p> <p><b>Third Party Intellectual Assets acquired for use under the agreement:</b> Under this Agreement, Syngenta provides the hybrid seeds (maize, tomato, sweet pepper, and cabbage hybrids), crop protection products, and standard protocols for the crops to IITA to carry out variety trials on IITA sites in Nigeria. Syngenta retains the full ownership of the sample, results and related IP rights.</p>  |
| <p>3. <u>Description of the downstream restrictions to the global accessibility of the products/services resulting from their use (e.g. any confidentiality and/or exclusivity arrangements, etc.)</u></p>             | <p><b>The downstream restrictions to the global accessibility of the products/services resulting from the use of the background technology is: Clause 5.2 of the Supply Agreement</b> states thus; <i>‘Unless otherwise explicitly agreed in a SOW, any and all studies, analyses, creative materials, reports, inventions, improvements, intellectual property rights, documents and any other work product generated by IITA in connection with the provision of services and/or products under a particular SOW and all rights thereto (collectively, the “Results”) shall be the exclusive property of Syngenta. Upon request of Syngenta, supplier shall transfer all such results to Syngenta free of charge.’</i></p> <p>The implication of this is that any results/improvements to the intellectual assets will be the exclusive property of Syngenta thereby restricting IITA’s ability to use said improvements as desired.</p> <p>However, in the trial SOW (i), this is followed by: <i>‘IITA is allowed to publish results if written permission from Syngenta Nigeria Ltd. has been provided’</i>; and in the Training Program SOW (ii) it is stated that <i>‘Training material can be used by other clients if agreed with Syngenta Nigeria Ltd.’</i>.</p>   |
| <p>4. <u>Justifications showing that requirements of Article 6.3 are met:</u></p>  |  |
| <ul style="list-style-type: none"> <li>▪ Indicate that, to the best of the Center’s knowledge, no equivalent Intellectual Assets were available from other sources under no or less restrictive conditions;</li> </ul> | <p>IITA carefully considered if no equivalent Intellectual Assets were available from other sources under no or less restrictive conditions.</p> <p>Syngenta Crop Protection AG (<a href="http://www.syngentacropprotection.com/">www.syngentacropprotection.com/</a>) is a corporation organized under the laws of Switzerland, and their products are designed to improve crop yield and health in all stages of plant development, improve plant vigor and reduce yield losses during periods of drought or heat. The company has a global research and development presence and focuses on improving quality and productivity of seeds and adapting its technology to the local market of each country concerned.</p> <p>Syngenta has developed early and intermediate maize hybrids, they also developed hybrids of tomatoes, sweet pepper and cabbages that are well adapted to soil and climatic conditions in India and Brazil. These two countries have similar environments and soil structures to the vegetable production areas in Nigeria. It is anticipated that by testing these hybrids in Nigeria, those that are adaptable to the Nigerian environment and provide high yields can be identified and adopted by the vegetable farmers in Nigeria for production. Syngenta can then go on to screen/evaluate, release, register and commercialize these hybrids in Nigeria.</p> <p>There are of course other multinational companies like Syngenta, who are keen to come onto the potentially large Nigerian Market; however, similar IAs would not be available under less restrictive conditions, as other comparable multinational companies with the same quality products would have similar restrictive conditions.</p> <p>Local seed companies in Nigeria (mostly SMEs) hardly exist and the existing ones are primarily seed distributors; they do not develop their own hybrids.</p> |

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| <ul style="list-style-type: none"> <li>Explain how “<i>the products/ services that are intended to result from the use of such third party Intellectual Assets will further the CGIAR Vision in the countries where they can be made available</i>”;</li> </ul>  | <p>After careful consideration and thorough and lengthy negotiations with Syngenta, IITA concluded that this public-private partnership contributes to maximize impact in furtherance of CGIAR’s vision to reduce poverty and hunger, improve human health and nutrition, and enhance ecosystem resilience through high-quality international agricultural research, partnership and leadership.</p> <p>In the pursuit of this mission, IITA’s research and development results (knowledge, data, technologies, developed varieties, etc.) need to get out to IITA’s clients, partners, stakeholders and beneficiaries. For this to happen, IITA works in partnership with traditional partners in the public sector, but also has to work through partnerships in the private sector. The ultimate goal of partnering with the private sector is to achieve impact and to deliver to IITA’s clients, partners, stakeholders and beneficiaries, towards achieving IITA’s mission.</p> <p>The results/products from the use of these background intellectual assets will further the CGIAR vision in Nigeria because the main beneficiaries will be the maize and vegetable farmers in Nigeria especially the ones located in the Sudan Savanna and the Guinea Savanna, the derived Savanna and the Humid Forest Agro-ecological zones. More farmers will have better access to good quality certified seeds at relatively affordable prices from improved maize and vegetable hybrids developed by Syngenta, which will invariably boost their crop yields.</p> |
| <ul style="list-style-type: none"> <li>Describe any measures taken to ensure that the third party Intellectual Assets are only used in relation to, or incorporated into, such intended products/services.</li> </ul>  | <p>Best efforts have been made by IITA to ensure that the third party IAs are only used in relation to this service by carrying out screening and evaluation of the hybrids in separate variety testing sites, and by using field management procedures to ensure this, with IITA scientists and their staff fully aware of procedures and protocols, including provision of security for the trail sites, following Good Experimentation Practice, and destruction of harvest.</p>   |
| <p>5. <b>Public disclosure:</b><br/>Indicate whether there have been any public communications of key information regarding the Restricted Use Agreement as per subsection d) of the section on Reporting (article 10) above, and if so, confirm that all such communications have been made available to the Consortium Office.</p> | <p>Information about the RUA is available on IITA’s website and was made available in an email to the Consortium Office (as directed in the IA Guidelines) on 17 July 2014 (the day of signing the Agreement). The email was acknowledged by the Communication Specialist of the Consortium Office on 21 July 2014.</p>   |

**B. IP Applications (registrations/applications for patent or plant variety protection)**

NA

Dated **27 February 2015** at **Ibadan, Nigeria**

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**Annex 1.**

**Register of Intellectual Property Generated within a Project**

**Project Name:**

**Project Number:**

**PI/PM:**

*This is an important part of identifying the Intellectual Assets received or developed by IITA*

**Background inventory**

**To be completed at start of project, after proposal approved**

| <b>Background inventory</b>            | <b>Source<sup>1</sup></b> | <b>Owner</b> | <b>IITA right to use</b> |
|--|---------------------------|--------------|--------------------------|
| DNA sequences                          |                           |              |                          |
| Molecular markers:                     |                           |              |                          |
| Bacteria                               |                           |              |                          |
| Technology – e.g. know-how, techniques |                           |              |                          |
| Germplasm Varieties:                   |                           |              |                          |
| Data                                   |                           |              |                          |
| Knowledge                              |                           |              |                          |

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<sup>1</sup> i.e. the Agreement under which it is received, or if internal, then the project from which it comes

## Expected IP Outcomes

To be completed at start of project, after proposal approved

|                   | Expected IP outcomes | Developer | IP Status |
|-------------------|----------------------|-----------|-----------|
| DNA sequences     |                      |           |           |
| Molecular markers |                      |           |           |
| Bacteria          |                      |           |           |
| Technology        |                      |           |           |
| Germplasm         |                      |           |           |
| Data              |                      |           |           |
| Knowledge         |                      |           |           |

## IP Outcomes

To be completed at end of end of project

| IP deliverables from the project | Ownership | Disclosure/release <sup>2</sup> |
|----------------------------------|-----------|---------------------------------|
| DNA sequences                    |           |                                 |
| Molecular markers                |           |                                 |
| Bacteria                         |           |                                 |
| Technology                       |           |                                 |
| Germplasm                        |           |                                 |
| Data                             |           |                                 |
| Knowledge                        |           |                                 |

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<sup>2</sup> i.e. when was it released, and where (e.g. Open Access)

**Annex 2.**

**New Crop Varieties Released by IITA partner Institutes in 2014**

| S/N | Crop    | Clone                          | Trait Classification  | Country released | Local name for variety | Partners/ Collaborators   |
|-----|---------|--------------------------------|---|------------------|------------------------|---|
| 1   | Cassava | IITA-TMS-1BA070539             | Yellow Root, Multiple Pests Resistance, High Yielding (> 25 t/ha), Early Bulking, stay green and drought tolerant yellow root, multiple | Nigeria          | UMUCASS 46             | NRCRI   |
| 2   |         | IITA-TMS-IBA070593             | Yellow Root, Multiple Pests Resistance, High Yielding (> 25 t/ha), Early Bulking, stay green  | Nigeria          | UMUCASS 45             | NRCRI   |
| 3   |         | NR 07/0220                     | Yellow Root, Multiple Pests Resistance, High Yielding (> 25 t/ha), Early Bulking, stay green and drought tolerant                       | Nigeria          | UMUCASS 44             | NRCRI   |
| 4   |         | TMS 980505                     |   | Liberia          | TMS 980505             | CARI  |
| 5   |         | TMS 920057                     |   | Liberia          | TMS 920057             | CARI  |
| 6   |         | TMS 30572                      |   | Liberia          | TMS 30572              | CARI  |
| 7   |         | TME 419 (SLICASS 7)            | High Dry Matter (30-33%), Multiple Pests Resistance, High starch and High Yielding (> 30 t/ha)  | Sierra Leone     | SLICASS 7              | SLARI   |
| 8   |         | TME 7 (SLICASS 8)              | High Dry Matter (35%), Multiple Pests Resistance, High starch and High Yielding (> 35 t/ha)   | Sierra Leone     | SLICASS 8              | SLARI   |
| 9   |         | TME 1 (SLICASS 9)              | High Dry Matter (30%), Multiple Pests Resistance, High starch and High Yielding (> 30 t/ha)   | Sierra Leone     | SLICASS 9              | SLARI   |
| 10  |         | TME 7 (2) (SLICASS 10)         | High Dry Matter (34%), Multiple Pests Resistance, High starch and High Yielding (> 38 t/ha)   | Sierra Leone     | SLICASS 10             | SLARI   |
| 11  |         | TME 7 (4) (SLICASS 11)         | High Dry Matter (25%), Multiple Pests Resistance, High starch and High Yielding (> 35 t/ha)   | Sierra Leone     | SLICASS 11             | SLARI   |
| 12  |         | TMS06/1635 (SLICASS 12)        | High Dry Matter (35%), Multiple Pests Resistance, High starch and High Yielding (> 35 t/ha)   | Sierra Leone     | SLICASS 12             | SLARI   |
| 13  |         | SLICASS 1 (05)-14 (SLICASS 13) | High Dry Matter (25%), Multiple Pests Resistance, High starch and High Yielding (> 30 t/ha)   | Sierra Leone     | SLICASS 13             | SLARI   |
| 14  |         | TMS 97/4407 (6) (SLICASS 14)   | High Dry Matter (25%), Multiple Pests Resistance, High starch and High Yielding (> 30 t/ha)   | Sierra Leone     | SLICASS 14             | SLARI   |
| 15  | Maize   | IITA-IR-MAIZE HYBRID -2        | <i>Striga</i> -tolerant, metsulfuron methyl (MSM)-resistant   | Nigeria          | P48W01                 | Dupont Pioneer  |
| 16  |         | IITA-IR-MAIZE HYBRID- 4        | <i>Striga</i> -tolerant, metsulfuron methyl (MSM)-resistant   | Nigeria          | P48W03                 | Dupont Pioneer  |
| 17  |         | TZEI 124 x TZEI 25             | Drought and low soil nitrogen tolerant, striga resistant, streak resistant and high yielding (> 6 t/ha)                                 | Nigeria          | SAMMAZ 40              | IAR&T ; IAR; OAU, Ife; University of Ilorin; University of Maiduguri and Seed |

|    |         |                                       |   |         |            | Companies  |
|----|---------|---------------------------------------|---|---------|------------|--|
| 18 |         | TZE-Y Pop<br>STR C4 x TZEI<br>13      | Drought and low soil nitrogen<br>tolerant, striga resistant, streak<br>resistant and high yielding (> 6<br>t/ha)  | Nigeria | SAMMAZ 41  | IAR&T ; IAR;<br>OAU, Ife;<br>University of<br>Ilorin;<br>University of<br>Maiduguri and<br>Seed<br>Companies |
| 19 |         | TZEI 124 x<br>TZEI 25                 | Drought and low soil nitrogen<br>tolerant, striga resistant, streak<br>resistant and high yielding (> 6<br>t/ha)  | Mali    | Sosani     | IER; Seed<br>Companies   |
| 20 |         | TZEI 24 x TZEI<br>17                  | Drought and low soil nitrogen<br>tolerant, striga resistant, streak<br>resistant and high yielding (> 6<br>t/ha)  | Mali    | -          | -  |
| 21 |         | TZEI 11 x TZEI<br>23                  | Drought and low soil nitrogen<br>tolerant, striga resistant, streak<br>resistant and high yielding (> 6<br>t/ha)  | Mali    | -          | -  |
| 22 |         | TZEE-Y Pop<br>DT STR C5 x<br>TZEEI 58 | Drought and low soil nitrogen<br>tolerant, striga resistant, streak<br>resistant and high yielding (> 6<br>t/ha)  | Mali    | Sahel Kaba | -  |
| 23 |         | TZEE-W Pop<br>DT STR C5 x<br>TZEEI 6  | Drought and low soil nitrogen<br>tolerant, striga resistant, streak<br>resistant and high yielding (> 6<br>t/ha)  | Mali    | -          | -  |
| 24 |         | PVA SYN 3                             | Provitamin A enriched   | Mali    | Nafama     | IER  |
| 25 | Soybean | TGx 1988-5F                           | Matures in 90-100 days<br>Potential yield 2.5tons/ha,<br>promiscuous nodulation,<br>resistant to rust, cercospora<br>leafspot and bacterial pustule.<br>Protein 35%, Ash 6%, Oil 18%.<br>Suitable for mechanized<br>harvesting.   | Nigeria | NCRISOY-1  | NCRI   |
| 26 |         | TGx 1989-19F                          | Matures in 101-110 days<br>Potential yield 3.0 tons/ha,<br>promiscuous nodulation,<br>resistant to rust, cercospora<br>leafspot and bacterial pustule.<br>Protein 38%, Ash 6%, Oil 18%.<br>Suitable for mechanized<br>harvesting. | Nigeria | NCRISOY-2  | NCRI   |
|    |         |                                       |   |         |            |  |

## Annex 2.

### **Working with companies: Guidelines for Public-Private Partnerships (PPPs) - External**

The purpose of this document is to set out some of the key Intellectual Assets principles and related elements that IITA takes into consideration when working with the private sector.

The International Institute of Tropical Agriculture (IITA, [www.iita.org](http://www.iita.org)) is an Africa-based international not-for-profit research-for-development organization, established in 1967, and governed by a board of trustees. IITA is a member of the CGIAR Consortium, a global research partnership for a food secure future. IITA's mission is to offer a leading research partnership that facilitates agricultural solutions for hunger, poverty, and natural resource degradation throughout the tropics. IITA has over 100 internationally recruited staff and around 1000 support staff based in various IITA stations across Africa. IITA's mission is in line with that of the new CGIAR and focuses on the four system-level outcomes (SLOs); (1) increase in food security, (2) reduction of rural poverty, (3) reduction of undernutrition, and (4) more sustainable management of natural resources.

IITA is keen to work with the private sector through public-private partnerships to maximize impact in furtherance of CGIAR's vision to reduce poverty and hunger, improve human health and nutrition, and enhance ecosystem resilience through high-quality international agricultural research, partnership and leadership. IITA has developed various strategies for working with the private sector; like their Public-Private Partnership strategy and plans for a Business Incubation Platform (IITA 2012-2020 Refreshed Strategy, [http://www.iita.org/c/document\\_library/get\\_file?uuid=bd62b9be-a2f4-486d-8cd5-bbcd6a40a806&groupId=25357](http://www.iita.org/c/document_library/get_file?uuid=bd62b9be-a2f4-486d-8cd5-bbcd6a40a806&groupId=25357))

### **Compliance with the CGIAR IA Principles**

IITA is an independent legal entity, however, as part of the CGIAR it has also committed to some common rules and principles, including the Principles on the Management of Intellectual Assets ("IA Principles", [http://www.cgiarfund.org/sites/cgiarfund.org/files/Documents/PDF/fc7\\_cgiar\\_ia\\_Principles\\_inclusion\\_COF\\_Feb16\\_2012.pdf](http://www.cgiarfund.org/sites/cgiarfund.org/files/Documents/PDF/fc7_cgiar_ia_Principles_inclusion_COF_Feb16_2012.pdf)) and the corresponding Guidelines on the Management of Intellectual Assets ("IA Guidelines", [http://library.cgiar.org/bitstream/handle/10947/2846/Implementation\\_Guidelines\\_-\\_For\\_the\\_CGIAR\\_IA\\_Principles\\_on\\_the\\_Management\\_of\\_Intellectual\\_Assets.pdf?sequence=1](http://library.cgiar.org/bitstream/handle/10947/2846/Implementation_Guidelines_-_For_the_CGIAR_IA_Principles_on_the_Management_of_Intellectual_Assets.pdf?sequence=1)).

Below are key IP-related elements that need to be addressed in Public-Private Partnerships. There is some flexibility in some areas, while other principles cannot be ignored.

1. In general, the following provisions are acceptable to IITA for ownership of results:

- IP Results may be owned by IITA; or
- IP Results are jointly owned on the basis that IITA may use the Results freely without approval from the co-owners; or
- IP Results are owned by the partners on the basis that IITA has a non-exclusive, royalty-free unlimited licence to use the Results freely without further approval from the owner;

2. If the transaction involves exclusivity, it can only be limited (Limited Exclusivity Agreement under the IA Principles), and:

- the transaction must be notified by the Centre to the Consortium Office ("CO");
- the exclusivity must be the minimum exclusivity that could be agreed;
- the Centre must also inform the CO about the grounds for granting the Limited Exclusivity, known as "Justifications";
- the Centre is required to make publicly available key information regarding the transaction;
- the CO will also make key information public, and include information in its Annual Report.

If the transaction does not comply with the IA Principles Research and Emergency provisions<sup>i</sup> then:

- the Centre must inform the CO about the grounds for excluding the Research and Emergency provisions;
- the transaction must be approved by the CO *before signing*, and the CO has thirty (30) days to decide whether to give approval;
- the Centre is required to make publicly available key information regarding the transaction;
- the CO will also make key information public, and include information in its Annual Report.

3. In general, the following provisions are not acceptable to IITA:

- the existence of the transaction cannot be made public;
- key information about the contents of the transaction cannot be made public;
- the transaction prevents IITA from working with anyone else in the same field for the duration of the contract;
- IITA is under an obligation to participate in IP management, e.g. policing, or contributing to IP application/enforcement costs;
- if there are likely to be any protectable results, e.g. patent or plant variety rights (pvr), these must be "carefully considered" by IITA before it can become co-owner;

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i

#### Limited exclusivity agreements

IITA may grant limited exclusivity for commercialisation of the IA that it produces, provided that such exclusivity is necessary to improve IA, or enhance the scale or scope of impact on target beneficiaries, in furtherance with the IITA mission, and as limited as possible in duration, territory or field of use.

In such limited exclusivity agreements, IA must remain available in ALL countries:

- for non commercial research by public sector organisations in furtherance of CGIAR vision (Research Exemption);
- in the event of a national or regional food security emergency (Emergency Exemption).

It is the policy of IITA and CGIAR that the above exemptions should be maintained unless there are compelling reasons to depart from them. If, however, IITA wishes to execute an agreement without these exemptions, it needs to secure express prior permission from CGIAR.

#### Restricted use agreements

In some cases, rather than considering the IA that results from a research project, IITA may need to use or acquire third party IA in pursuit of a research project. IITA may enter into agreements for the acquisition and use of third party IA that restricts the global accessibility of the products/services resulting from such project, provided that:

- IITA is, to the best of its knowledge, unable to acquire equivalent IA from other sources under no or less restrictive conditions,
- the products/ services that are intended to result from the use of such third party IA will further the CGIAR Vision in the countries where they can be made available, and
- IITA shall use its best efforts to ensure that such third party IA is only used in relation to, or incorporated into, such intended products/services.