Tandem Workshop on the Nagoya Protocol on Access and Benefit-Sharing & The Multi-Lateral System of Access and Benefit-Sharing under the International Treaty on Plant Genetic Resources for Food & Agriculture (ITPGRFA)

29th September 2017, Paro, Bhutan

Workshop Report

Tandem Workshop on the Nagoya Protocol on Access and Benefit-Sharing & The Multi-Lateral System of Access and Benefit-Sharing under the International Treaty on Plant Genetic Resources for Food & Agriculture (ITPGRFA)

Workshop Report

29th September 2017, Paro, Bhutan

Publisher:
National Biodiversity Centre (NBC), Ministry of Agriculture and Forests,
Serbithang, Thimphu, Bhutan
P.O. Box 875

Authors: Chencho Dorji (NBC), Mani Prasad Nirola (NBC) and Ronnie Vernooy (Bioversity International)
Design and Layout: Chencho Dorji (NBC)
Cover Photos: Chencho Dorji, NBC (Front) and Ronnie Vernooy, Bioversity International (Back)

Citation:
Dorji, C., Nirola, M. P. and Vernooy, R. 2018. Workshop Report. Tandem Workshop on the Nagoya Protocol on Access and Benefit-Sharing & The Multi-Lateral System of Access and Benefit-Sharing under the International Treaty on Plant Genetic Resources for Food & Agriculture (ITPGRFA), 29th September 2017, Paro, Bhutan.

INTRODUCTION

Many countries are now focusing on promoting mutually supportive implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Yet a key challenge is building the necessary capacity at national level to understand the interface between the two treaties, harmonize national legislation and design effective measures for implementation.

Ronnie Vernooy facilitating the tandem workshop (Photo: Chencho Dorji/NBC)

The National Biodiversity Centre under the Ministry of Agriculture and Forests, Bhutan, is the National Focal Point for the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) as well as for the Nagoya Protocol (under the Convention on Biological Diversity). Since 2012, the Centre has been working together with Bioversity International to promote the mutually supportive implementation of the ITPGRFA and the Nagoya Protocol under the umbrella of the Genetic Resources Policy Initiatives Phase 2 (GRPI 2).[1]

[1] For more information: https://www.bioversityinternational.org/research-portfolio/policies-for-plant-diversity-management/mutual-implementation-of-nagoya-protocol-and-plant-treaty/

In recent years, a number of awareness raising activities about the ITPGRFA and the Nagoya Protocol were organized in Bhutan by the NBC and Bioversity International. To further strengthen national capacities for effective implementation of both treaties a so-called "Tandem Workshop" was held for key national stakeholders to deepen the understanding of the mutually supportive implementation of both treaties (hence, the use of the word tandem).

The Tandem Workshop on the Nagoya Protocol on Access and Benefit-Sharing & The Multi-Lateral System of Access and Benefit-Sharing under the International Treaty on Plant Genetic Resources for Food & Agriculture (ITPGRFA), the first of its kind in the country, was organized on 29th September, 2017, by the National Biodiversity Centre, the Ministry of Agriculture and Forests. The aim was to strengthen national capacity and share knowledge on the mutually supportive implementation interface between the Nagoya Protocol and the ITPGRFA, in the context of broader national policy goals; and to identify the core issues of the implementation interface of the ITPGRFA and the Nagoya Protocol.

The participants came from the Department of Agriculture, Bhutan Agriculture and Food Regulatory Authority, Bhutan Alpine Seeds (company), Department of Forest and Park Services, RDC Yusipang, RDC Bajo, Legal Unit-MoAF, Royal University of Bhutan, UNDP CO, College of Natural Resources, Bioversity International and the National Biodiversity Centre.

The program included short presentations about Bhutan's seed systems, the background and achievements of the GRPI 2 initiative, and ways to strengthen the national capacity to implement the ITPGRFA. These presentations were followed by a series of intensive group exercises to obtain a better understanding of the mutually supportive implementation of the Plant Treaty and the Nagoya Protocol. Participants did the group exercises with the help of a number of learning scenarios.[2]

[2] The scenarios are available at:
https://www.bioversityinternational.org/fileadmin/user_upload/research/research_portfolio/policies_for_crop/Mutually_supportive_implementation_scenarios.pdf

PARTNERS AND PARTICIPANTS

The National Biodiversity Center (NBC), Ministry of Agriculture and Forests in collaboration with Bioversity International organized the workshop with financial support from Bioversity International. UNDP-Bhutan and GEF also supported the workshop financially through their project "Implementing the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Bhutan".

A total of 27 people (Annex II) including researchers, academics, lawyers, conservationists, developers, regulators and entrepreneurs, representing government agencies, research institutes, private sector, development partners, and academic institutions participated in the workshop.

ORGANIZATION OF THE WORKSHOP PROGRAMME

The one day workshop was divided into two parts (Annex III). The first part of the workshop was focused on setting the stage with three presentations. An introduction to community seed banks in Bhutan was presented by Mr. Rinchen Dorji, NBC. He was followed by Dr. Ronnie Vernooy, Bioversity International, who highlighted the importance of mutually supportive implementation. The session was closed with a presentation by Mr. Lhab Tshering, NBC, on the background and achievements of the GRPI 2 initiative in Bhutan jointly implemented by Bhutan and Biodiversity International.

The second part of the workshop was focused on group work. The participants worked in groups of four consisting of 6-7 people. Each group choose two learning scenarios from a total of eight and then discussed how best to find solutions for the challenges that the scenarios represented. Each group then presented their solutions to the plenary. This was followed by a plenary discussion on the scenario with all the participants facilitated by Ronnie Vernooy, Bioversity International.

GROUP WORK

Group work sessions (Photo: Chencho Dorji/ NBC)

SCENARIO A: Biofuel Solutions Incorporated

A.1. You are the director of a national genebank with a well-known sorghum collection. You receive a request from Biofuels Solutions Inc. asking for a number of sorghum accessions for use in their research and development programme. What are your options? What rules apply? How do you ultimately resolve the issue?

A.2. You have received samples of maize under the SMTA for use in your organization's breeding programme. You have conserved copies of those materials. You receive a request from Biofuels Solutions Inc. for samples of that conserved material. What rules apply? What do you do?

<u>Solutions:</u>

A1. The group considered that they needed to share the sorghum with Biofuels Solutions Inc. for use in their research and development programme given that sorghum is an Annex 1 crop under the ITPGRFA. The important step identified was to double-check if the intended purposes are precisely according to the purposes defined in the ITPGRFA (if positive, the

accessions can be transferred by means of a SMTA). If the purposes are different (for example, not for food and agriculture), the next step is to discuss another (access and benefit sharing or ABS) agreement based on mutually agreed terms for sharing the accessions. The group considered that by all means there needs to be a legally binding agreement.

A2. The group considered that either ITPGRFA or ABS rules could apply depending on the purpose(s) of utilization. In this case, it was considered instrumental to determine Biofuel Solutions Inc.'s objective(s) and then decide the solutions as outlined below:

PURPOSE	
Scenario 1: for Food and Fodder	Scenario 2: for Fuel
3rd party transfer by means of a SMTA and give the samples to Biofuel Solutions Inc.	3rd party transfer by means of SMTA is not allowed and reject the transfer
ITPGRFA	ABS

Commentary:[3]
In such a scenario, the genebank director needs to consider a series of questions to determine how to proceed. Concerning A1., given that sorghum is one of the crops listed in Annex I of the ITPGRFA, the important question is to determine if the PGRFA in question is under the management and control of the Contracting Party concerned and in the public domain and also if its proposed use is for food and agriculture. If so, then the transfer can be made using a SMTA, but if not the transfer should be considered under the Nagoya Protocol.

SCENARIO B: The SMTA and national checkpoints established for the implementation of the Nagoya Protocol

B. You are in charge of the national plant variety registration office that has been designated as a checkpoint as part of the national strategy to implement the Nagoya Protocol. An applicant who wants to register a new plant variety provides copies of SMTAs as evidence that he legally received materials that are incorporated (by conventional breeding techniques) into the new variety he seeks to register. What do you do?

[3] See the reference in footnote 2 for (more) detailed commentary for each of the scenarios.

Solutions:

The group considered that the National Focal Point for Nagoya Protocol and ITPGRFA in Bhutan is the National Biodiversity Centre. Bhutan's Plant Variety Registration office overseen by a Variety Release Committee (VRC; there are 11 members from DoA, NBC, BAFRA, DoL, DoFPS). Therefore, the first step is to review the SMTAs and the proposal for Variety Registration as per the procedure for Release of a Variety specified by the VRC. Depending on the VRC's decision to approve the proposal, the proposal should be submitted to the National Seed Board for final endorsement.

Commentary:

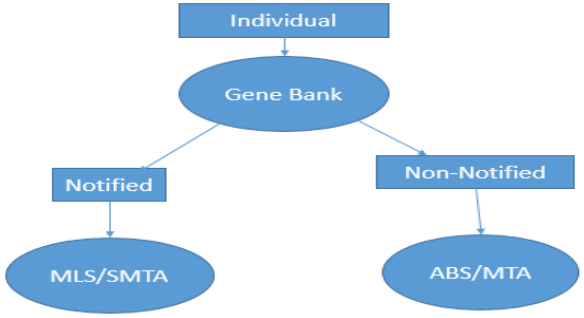
The group's presentation focused on the existing national process only. The ideal solution for such as case scenario is that as a checkpoint, if you are presented with a SMTA (or documentation showing that the genetic material was accessed with an SMTA), you should understand that utilization of that material is beyond your monitoring responsibilities as it is being 'taken care of' through reporting, monitoring and compliance under the ITPGRFA.

SCENARIO C: Reporting transfers

C. In the last six months, you have sent samples of both Annex I and non-Annex I materials from collections hosted by the national genebank and national public breeding programmes to recipients outside the country. Where do you report those transfers? How?

Solutions:

For Annex I samples the following was suggested: (A) Annex-I



B) Non-Annex – I
ABS/MTA

Commentary:
The group presented a flow chart highlighting the transfer flow and its required permits. However, in this type of case scenario, if the transfer is using a SMTA, whether or not it belongs to crops listed in Annex I of the ITPGRFA, the provider needs to notify the Governing Body of the ITPGRFA via the Secretary of the ITPGRFA. The ITPGRFA's Secretariat developed a software -Easy SMTA- which providers can use to generate SMTAs and report electronically to the Governing Body. In case the transfer is granted using a permit or its equivalent (and not the SMTA), the involved officially designated representative of the Nagoya Protocol in the country needs to notify the ABS Clearing-House.

Group work sessions (Photo: Ronnie Vernooy/Bioversity International)

SCENARIO D: *In situ* materials

You have been designated as your country's competent national authority under the regulatory regime for implementing the Nagoya Protocol.

D.1. You receive a request to collect samples from coconut trees that grow along the country's publicly owned beaches. How do you respond?

D.2. There are wild relatives of teff and cassava growing in some nationally protected areas. An agricultural research organization in another ITPGRFA member state has written requesting permission to organize a collecting mission to gather samples of these plants. What are your options? What rules apply? How, ultimately, do you reply? Why?

Solutions:
D1. The group decided to assess the purpose for which the sample is needed and which part of plant is needed. If it is listed in the Red-list then special considerations apply. Only after answering the above questions, a decision can be made to use a SMTA, but if it is for commercial purpose then an ABS agreement should be developed.
D2. The group considered that it will not allow to collect from protected areas. In the case of Bhutan, the Bhutan Forest and Nature Conservation Act and its rules and regulations apply.

Commentary:
The group presented a clear outline on the threshold questions to determine which set of rules applies for this request. Some additional questions to be asked are, for D1: Are coconuts one of the crops listed in Annex I of the ITPGRFA? Are the PGRFA in question under the management and control of the Contracting Party concerned and in the public domain and, therefore, automatically included in the MLS? What other land management or environment protection rules currently exist that may regulate how the coconuts are managed and/or accessed? The combination of the application of other laws involved and the ITPGRFA is that, if and when, a decision is made to allow collecting pursuant to the laws applying to the area in question, the PGRFA will eventually need to be transferred under SMTA. Simultaneous application of these different rules will require close cooperation between the competent authorities involved. If the requestor is located in a country that is not a Contracting Party to the ITPGRFA, it is up to the provider country to decide using the SMTA or enter into a separate bilateral agreement with the requestor subject to the laws implementing the Nagoya Protocol.

Regarding D2. Many of the same considerations concerning the scenario D1 are relevant to this scenario as well. The key questions to be asked are is it listed in Annex I of the ITPGRFA? Are the PGRFA in question under the management and control of the Contracting Party concerned and in the public domain and, therefore, automatically included in the MLS? What

other land management or environment protection rules currently exist that may regulate how the crops are managed and/or accessed? If the requirement of these other land management or environment protection rules are met, then samples of the *Manihot esculenta* subspecies *flabellifolia* can ultimately be transferred to the requesting party using the SMTA. Access to teff and other cassava wild relatives may be subject to national rules for implementation of the Nagoya Protocol assuming the request is for the purpose of utilization as defined in the Nagoya Protocol.

SCENARIO E: *Legal space*

You are the head of a national crop genebank. You have received a request from a researcher in a neighboring country for samples of some chickpeas from your collection. Your country acceded to the CBD in 1998 and ratified the ITPGRFA in 2003 and the Nagoya Protocol in 2013.

E.1. There is no national law implementing any of these agreements.

E.2. There is a national access and benefit-sharing law from 2000 that says all access to any genetic resources in the country must be subject to the PIC of the competent authority appointed by the minister of the environment and must include a number of mandatory benefit-sharing terms that are not consistent with the SMTA.

For both cases E.1 and E.2, what do you do? Why?

Solutions:
E1. The group considered to send the materials with signing of a MTA based on the commitment to CBD.

E2. In this case too, the group considered to share the material through a MTA under the Nagoya Protocol and negotiate benefits as per the existing ABS laws.

Commentary:
The case 1 is related to no implementation due to lack of national laws and it adds to the genebank manager's uncertainties. The crucial questions to be considered are: Is the material in the MLS? Does the genebank manager need a national law to go ahead and make MLS available using the SMTA?
With regard to case 2, the pertinent question is which legal obligation takes precedence: the older national law or the more recently ratified international agreements? The answer depends upon the political and legal system of the country concerned. The second key point is to understand who has the authority to sign the SMTA.

SCENARIO F: *Genebanker's uncertainty*

You are the head of the national genebank. Your genebank holds a wide range of both Annex I and non-Annex I materials that have been collected over the last 20 years.

F.1. You are pretty sure that most, probably all, of the Annex I material in the genebank is in the MLS. But something is holding you back from distributing samples of that Annex I material using the SMTA. What is holding you back? How can you get to the bottom of the issue so you feel comfortable making decisions when you get requests?

F.2. There are crop improvement programmes for both Annex I and non-Annex I crops in the country, which are supported through partnerships (including germplasm and knowledge exchange) with research organizations outside the country. The national genebank supports these crop improvement programmes by acquiring, conserving and evaluating a diverse range of germplasm of those same crops. As part of its activities, the genebank also provides diversity to genebanks and breeders outside the country working on the same crops. You use the SMTA for Annex I materials, but you do not know what legal instrument to use when you are distributing the non-Annex I PGRFA to recipients both inside and outside the country. As luck would have it, you are having lunch tomorrow with the national focal points for the ITPGRFA and for the CBD/ Nagoya Protocol. You hope that you can urge them to come to a policy decision with respect to requests for non-Annex I PGRFA in the genebank. You will need to give them a thorough briefing before they can decide. What are their options? What do you advise is the best way forward? Why? Are there circumstances under which you would provide a different opinion?

Solutions:
F1. The group presented that the thought of misuse of the materials is holding them back and they would seek clarity from the Nagoya Protocol Focal Point as well as the ITPGRFA Focal Point in their country to solve the issue.
F2. The group presented that for non-Annex I crops, they would brief the National Focal Points to comply with ABS laws and enter into ABS agreements.

Commentary:
In case of F1, the genebank manager's uncertainty can be attributed to concerns about needing to justify her actions in light of the fact that genetic resources issues are highly politicized in her country. In such cases, the genebank manager may

need to consider a number of different questions to help overcome her uncertainties namely: Are all the Annex I materials in the collection actually included in the MLS? Does she have the authority to decide how material in the genebank is handled? Whereas for F2, Contracting Parties to the ITPGRFA have no obligations to provide facilitated access to non-Annex I materials. They have the discretion/legal right to develop ABS agreements as providers of such materials pursuant to national laws implementing the Nagoya Protocol. However, there may be cases -such as in this scenario -when it may make sense to make non-Annex I materials available using SMTA, but some questions to consider in making this decision include: Are there significant benefits that could be gained by developing bilateral ABS agreements for the non-Annex I materials rather than transferring them using the SMTA? If so, do those benefits outweigh the benefits that would be gained through the crop improvement programme overall if the SMTA is used? Which sets of benefits are the most likely to actually materialize? Are the project partners open to developing new ABS agreements under the project, or will the prospect of having to negotiate such agreements discourage them, and possibly drive them away? Will the transaction cost for the genebank to develop new agreements for non-Annex I materials be sustainable over the long run? Such analysis is very crucial before deciding to make the materials available using SMTA.

SCENARIO G: *Farmers' collective wants to share with another farmers' collective in another country*

You work with a farmers' collective that maintains a collection of maize seeds (an Annex I crop). Another farmers' group in another country, with which you have close ties, has asked you for some samples. Your country has ratified the ITPGRFA (which says that Parties will take policy measures to encourage voluntary inclusions of materials in the MLS) as well as the CBD and the Nagoya Protocol. Your farmers' collective just wants to share the seed and does not care particularly what legal instrument it uses to send the materials. Can it just send the materials to the farmers group using the SMTA? Or some other instrument? Does it need to get permission first? If so, why? From whom?

Solutions:

The group presented to seek guidance of NBC-Focal Point and then accordingly seek approval of the Competent National Authority (MoAF) following the centralized system in place. The group pointed out the need to sign a MTA and also negotiate benefits.

Commentary:
In such case, there is no single correct answer of which legal regime applies, or how they apply. The answer depends partly on the political and legal systems of the countries concerned and partly on the roles of the state and non-state actors in the process. There are four ways the situation could ultimately be resolved: 1. The farmers send the materials themselves using an SMTA. 2 The farmers' collective deposits the maize in their country's national genebank, which subsequently sends samples to farmers' collective in the recipient country, using the SMTA. 3 The materials are sent using an access and benefit-sharing agreement negotiated pursuant to measures implementing the Nagoya Protocol. 4. The farmers send the materials themselves subjected to whatever terms and instruments they decide are most appropriate, without any requirements pursuant to the ITPGRFA or the Nagoya Protocol. However, the important factor is that all these ways are subjected to specific conditions.


Group presentations (Photo: Chencho Dorji/NBC)

SCENARIO H: ***Smallholder farmer as provider***

You are a smallholder farmer who intercrops maize, common bean, banana and coffee.

H.1. The local extension officer from the sub-district office of the national agricultural research organization comes to your house explaining that she is conducting a collecting mission as part of a large research programme involving local, national and international research and development organizations. They are looking into ways to improve these crops so that they

perform better under changing climate conditions, both in your country and abroad. She asks if you have seeds or cuttings that you are willing to share.

H.2. A seed breeding company representative stops by and asks you for seeds or cuttings of some of the plants he finds interesting.

H.3. The local extension officer comes by with a master's student working for the national genebank. They ask if they can have some seeds and cuttings to deposit in the genebank.

What do you do in each case? What rules apply?

Solutions:

H1. The group decided to first discuss and find the purpose for sharing of the seeds or cuttings and request to share information for the crops grown. Then they would share the seeds or cuttings after finding a way to track the seeds for planting materials taken from them. The critical question they would use before sharing is how the sharing of the seeds/cuttings would benefit them in the future? They would negotiate benefits if the purpose is research and subsequent commercialization.

H2. The group proposed to find out more more about the seed breeding company representative and the company as well as the reasons for its purpose and types of immediate and long-term benefits/acknowledgements that the company is willing to give. Last, they would consider the legal implications of sharing as per existing rules in place.

H3. The group again proposed to discuss the proposal enquiring about its purpose and probe into the mentioned gene bank, enquire about what types of general benefits they were willing to provide, the location of the genebank and its management status. The group would also seek answers concerning the possibility of getting both old and new seeds from the genebank for free. Concerning the rules, they suggest the existing national rules would apply.

Commentary:

In most countries, materials in farmers' fields and community genebanks would not be considered to be managed and controlled by the national government and therefore, not automatically included in the MLS. This analysis assumes that the farmers is in such a country and that she has not yet put her material voluntarily into the MLS. Accordingly, all three scenarios would likely be governed by the laws that implement the Nagoya Protocol, assuming that the uses of the materials would fall within the scope of the Nagoya Protocol.

EVALUATION OF THE WORKSHOP

After the workshop, participants were emailed seeking their feedback on three questions as below. Responses were received from 11 of the participants. Bold added by the authors.

1. *How useful was the workshop in terms of strengthening your capacity to analyze mutual supportive implementation scenarios?*

"The workshop was very useful in terms of understanding the interface in the implementation of the NP and ITPGRFA. The participation in the role-plays in all scenarios made us think a lot and brainstorm ourselves. **The role-plays [scenarios] were an important component of the workshop.**"

"The workshop was very useful and helped us to share our knowledge with other stakeholders".

"The workshop was very useful in understanding various aspect of implementation scenario. The group work provided insights on mutual supportive implementation scenarios with each group playing the role of different stakeholders. In the end the roles and responsibilities of the key stakeholders and what they are required to do was very clear in each group presentation. The exercise was very context specific and that helped in understanding more. It is through the interaction with the group members during the group work that I have been enlightened on the difference between the material transfer agreement and standard material transfer agreement. Therefore the workshop definitely enhanced my capacity."

"**While Bhutan has tried to harmonize the CBD/NP with the Treaty, the workshop helped us understand the complexities in implementation. We need to ask more questions and be clear on finding the middle path for both CBD/NP and ITPGRFA.**"

"The workshop enabled different stakeholders to come together to deliberate on issues that need mutual collaboration for successful implementation. The workshop was useful in helping us analyze and understand our roles and responsibilities when it comes to seed systems in the country."

"The workshop was designed in a simple yet effective way keeping in consideration all kinds of audience. In particularly, for a person working at the National Biodiversity Centre as the focal agency of the ITPGRFA it was not only insightful but also very helpful by promoting critical analysis of relevant case scenarios."

"The workshop was very informative and an eye opener for a person like me who is not from the agricultural background. I learned a lot about seed banks and their importance, the ITPGRFA to co-operate on seed and also the seed related business."

"The workshop was indeed useful to make the participants know about the status of the MLS and the ITGRFA, ABS policy in Bhutan, and the existence of SMTA and MTA. We also heard about the genetic base of crops and about community seed banks in the country. Third, participants have an idea about the activities of the National Biodiversity Centre and its collaboration at the global level."

"I strengthened my capacities related to the ITPGRFA and the Nagoya Protocol."

'The workshop greatly enhanced our knowledge on the status, challenges and scope for the ITPGRFA at national and international levels. Through the group work on the different scenarios, it further helped build our capacity to implement the Treaty effectively. **The workshop was very useful for us to analyze which particular scenarios are applicable in Bhutan and also how to handle more complex conditions. We now feel confident enough to take decisions easily with regards to PGRFA exchange.**"

"The workshop was very useful. Especially I learned about the mutually supportive system of implementation of the Nagoya protocol and the ITPGRFA through an analysis of many case scenarios. I realized how important seeds are for agriculture to address food security and nutrition. Many international experts come together, formulated and regulated various laws and treaties for our own requirement and peace."

"The workshop was useful to learn about the protocol related to seed banks, their management and laws regarding their operation. Working in groups with senior colleagues also provided me new insights I was not aware of before."

2. Do you foresee that you will be using what you have gained from the workshop in your work? If so, in which way(s)? If not, why not?

"Definitely yes. Because being a national focal point for NP and ITPGRFA, all the lessons learned from the workshop will be useful for us."

"**In the National Genebank, the workshop has immense impact since we will have to work with transfer and exchange of PGRFA at all levels, for which we will have to draw up agreements in line with the policies of Bhutan and international agreements like the ITPGRFA and CBD.**"

"Yes, very much. We will be revisiting our biodiversity bill and subsequently its regulations; during that period, I will be using what I have gained in the workshop to strengthen our legal frameworks and make it more mutually supportive."

"I may not put into use all that was taught and learned during the two day workshop, but definitely, some knowledge and information particularly on MTA and ABS will be of much use deciding on what crop varieties needs to be sent abroad or brought in for various research and development activities."

"Now that I have gained an insight to deal with difference case scenarios, I can apply the knowledge learnt during an actual case."

"I can foresee that I can use it and share with my colleagues what I have gained from the workshop. Since I am working in the genebank, I have to assure seed quality as per protocol and deliver services to communities and the international arena at large in due consultation with office stakeholders and as per rule of law. I can share knowledge with and update my field colleagues during collection times about the ITPGRFA and Nagoya protocol to some extent. I also would like to share with our valued farmers about the existence of treaties and protocols during seed collection time."

"**Being a representative of the Royal University, I feel I can share about the knowledge I gained from the workshop with my colleagues working in the colleges related to agriculture, so that they can share it with the**

students in the classrooms. I also have the handouts you have given to us which I can pass on to colleges so that it may benefit the agricultural students."

"The information received from the workshop will be shared with my fellow colleagues in the National Seed Centre, i.e. the application of SMTA and MTA, the use of the MLS for the sharing of genetic resources, and various policies at the global level."

"Most of the lessons and concepts learned were fairly new to me and I may not be able to apply the lessons in my work immediately. But the laws and procedures related to working with seed banks will be instrumental in working with and assisting the programs of seed banks in the future."

"Yes. I will be involved in the implementation of the Nagoya Protocol."

"The things that I learned from the workshop are very insightful and I will certainly use in my future work. There is a research project with JICA about organic weed control in rice, which also involves the cultivation of some of their new varieties. Since I gained a lot of knowledge from the workshop, I advised the project counterparts regarding the requirements which most of us miss to do. For instance, the SMTA for the imported rice and soybean varieties was not obtained and I briefed both the counterparts on the importance of the SMTA and other aspects I learned from the workshop."

3. Do you have any other feedback on the workshop?

"It was well organized. My view is that the workshop would have been very nice if the workshop was two-three days."

"**This workshop was very helpful in bringing together national stakeholders and sharing our knowledge on both CBD/NP and ITPGRFA. I hope in the future we are able to replicate such workshops at the regional level and include farmers, researchers and academicians.**"

"The workshop was very informative and educational especially for someone like myself who did not have much experience or information with regards to the seed systems of the country as well as the world."

"The workshop should include field trips to NBC, cover pre-information like Annex 1 crop, non-Annex 1 crops, background information like about the Nagoya protocol, so that all participants from other agencies will have better understanding."

"**The workshop was useful in many respects. It would make the outcome of the workshop even more explicit if there was a system of evaluating and tracing the process of implementing the lessons learned in the workshop. It is recommended for a future workshop.**"

"The workshop had diverse participants and it involved a lot of group work, which is one of the best ways to learn; besides, the resource person was very competent in his own field."

"It will be good to have another such workshop in the future."

"This kind of workshop proved very useful for the capacity building and awareness on the effective implementation of ITPGRFA at a National level and we look forward to such workshops in other implementing countries as well. We are very grateful to Bioversity International for holding the first ever such workshop in Bhutan."

ACKNOWLEDGEMENTS

National Biodiversity Center (NBC) would like to acknowledge and extend our gratitude to Bioversity International for supporting and financing to organize this workshop. Our sincere appreciations to UNDP-Bhutan and GEF for partially financing this workshop.

We remain highly indebt to Dr. Ronnie Vernooy, Bioversity International, for facilitating the workshop and sharing his expertise/insights on the topic as well as supporting us in making the workshop possible.

Last but not the least, we thank all the presenters and participants for your active role and support in making the workshop a great success.

Annex I:
Strengthening national capacities to implement the international Plant Treaty and mutually supportive implementation of the Plant Treaty and the Nagoya Protocol

Ronnie Vernooy, Bioversity International

Project highlights

From 2011 until 2017, Bioversity International coordinated the project 'Strengthening national capacities to implement the International Treaty on Plant Genetic Resources for Food and Agriculture'. The **project goals** were to: 1**)** Promote national implementation of the multilateral system of access and benefit sharing (MLS) of the ITPGRFA (the Treaty); 2) Increase countries' overall participation in the multilateral system both as providers and recipients of genetic resources; 3) Pursue options to benefit from other aspects of the ITPGRFA, including technology transfer. National research teams in **eight countries** led the research and capacity development activities: Bhutan and Nepal, Burkina Faso and Côte d'Ivoire, Rwanda and Uganda, and Costa Rica and Guatemala. The eight country research teams were trained in:

- *Policy actor and network analysis* to map key policy actors, networks and coalitions that influence plant genetic resources policies and laws, understand flows of information and financial resources and decision making processes, identify actors not included, but who should be included, and make suggestions for more inclusive processes. The eight country analyses raised the awareness of key stakeholders and contributed to building/strengthening a national policy platform.

- *Mapping flows of plant genetic resources and demonstrating the interdependence on external germplasm***.** The country studies provided empirical evidence of the very large extent to which the eight countries are dependent on foreign-sourced plant genetic resources for their agricultural research and development (including breeding) and ultimately for food security.

- *Development of a comprehensive seed resilience strategy* allowing farmers to access and use plant genetic diversity more effectively in the context of climate change adaptation. The strategy combines the use of climate and crop

modeling tools and participatory research methods. The eight country studies identified future plant genetic resources needs in light of climate change and contributed ideas for the development of resilient seed management strategies.

- *A case study methodology to document the experiences, achievements and challenges of community seed banks* to systematize experiences and explore options to link farmers to the ITPGRFA and make them benefit from better access to diverse, quality seeds. The research activities also provided country overviews of seed regulations and how they can be adjusted to promote and support community seed banks and contribute to on-farm and in situ agro-biodiversity conservation, both legally binding obligations of all contracting parties to the ITPGRFA. Country case studies were included in a book about community seed banking experiences from around the world edited by Ronnie Vernooy, Pitambar Shrestha and Bhuwon Sthapit, published by Routledge/Earthscan.

The multi-sectoral, multi-institutional and multi-stakeholder approach used by the project strengthened inter-institutional collaboration and cooperation in national efforts to implement the ITPGRFA and MLS. It created the necessary awareness among key stakeholders and facilitated the continued active participation of them in the ITPGRFA/MLS implementation processes. The approach was also effective to bring together the policy actors responsible for ITPGRFA implementation on the one hand and Convention on Biological Diversity-Nagoya Protocol on the other. These actors have begun to work in a mutually supportive manner to harmonize implementation of both agreements at national level, overcome distrust and build synergy. By December 2016 all eight countries had:

Made significant achievements in developing policies/laws and introducing them into formal national policy processes to create policy/legal space for Treaty implementation where this was considered necessary.

- Bhutan: Interim Access and Benefit Sharing (ABS) policy of Bhutan approved and Biodiversity Bill of the Kingdom of Bhutan, 2016, submitted for approval.

Identified what genetic resources within their country are to be included in the global pool of plant genetic resources for food and agriculture for agricultural research and development established by the ITPGRFA and notified the Secretary of the ITPGRFA about which accessions to include in the MLS.

- Bhutan: 60 accessions

Designated national competent authorities with responsibility to consider requests for access to plant genetic resources for food and agriculture and facilitate sharing of those resources with users both inside and outside the country.

- Bhutan: Ministry of Agriculture and Forests, with delegation of Treaty administration to the National Biodiversity Centre

Challenges and lessons learned

- National policymakers and stakeholders most actively appreciate the value of the ITPGRFA/MLS when it enhances their country's collective capacity to adapt to climate changes through the ability to access and use materials through the multilateral system.

- Second, when it overcomes systematic blockages to dynamic forms of *ex situ* and *in situ* conservation and sustainable use, where the MLS is implemented as part of a process of promoting novel forms of cooperation between genebanks, breeders, and collective action organizations at community levels (e.g. community seed banks).

- Policy implementation projects that do not include capacity building to help countries take advantage of the MLS as recipients and users of PGRFA (and instead focus entirely on putting systems in place for them to supply PGRFA) are less likely to make progress, because they do not 'speak to' policymakers', scientists' and farmers' sense of their country's immediate needs.

- Policy development and implementation efforts need to be accompanied by well-funded, wide-reaching communication campaigns to raise awareness among stakeholders generally, and to place indirect (but strategic) pressure on policymakers to take action.

- Most developing countries need to adopt new, or dramatically improve existing, national PGRFA information systems to manage and publish information about materials they are making available through the MLS. They also need training in conducting searches on other organizations' information systems to locate potentially useful germplasm.

- **National stakeholders are increasingly demanding that project support and policy development programmes to implement the ITPGRFA/MLS and the Nagoya Protocol should be interlinked given that the two agreements are so closely related, and they need to be implemented in harmonious, coordinated ways.**

Tandem workshops

In response to the demand for mutually supportive implementation of the ITPGRFA and the Nagoya Protocol, Bioversity International, in collaboration with the ABS Capacity Development (Germany, http://www.abs-initiative.info/), the CBD Secretariat (Canada, https://www.cbd.int/abs/), and the ITPGRFA Secretariat (Italy, http://www.fao.org/plant-treaty/en/), have organized a series of regional and national capacity development workshops. The aim of these workshops is to support focal points of both international agreements to work (more) effectively together towards common goals and to address the following challenges:

- Define legal space for ITPGRFA/MLS
- Identify which PGRFA are automatically in the MLS
- Decide about application procedures and decision-making for ITPGRFA and for CBD/Nagoya Protocol
- Establish a mutual consultation mechanism (when in doubt!)
- Promote and support continuous national institutional capacity development
- Link with efforts to implement rights of farmers' and indigenous communities

Sources and resources

https://www.bioversityinternational.org/research-portfolio/policies-for-plant-diversity-management/

https://www.bioversityinternational.org/research-portfolio/policies-for-plant-diversity-management/mutual-implementation-of-nagoya-protocol-and-plant-treaty/

www.bioversityinternational.org/research-portfolio/conservation-of-crop-diversity/community-seedbanks

http://grpi2.wordpress.com/

Annex II:
List of Participants

Sl. No.	Name	Organization	Email
1	Dr. Phanchung	OVC/RUB	phanchung.ovc@rub.edu.bt
2	Mr. Mani Prasad Nirola	NBC	mpnirola@moaf.gov.bt
3	Mr. Tshering Wangchen	RDC, Yusipang	tsheringwangchen@moaf.gov.bt
4	Mr. Lhab Tshering	NBC	lhabtshering@gmail.com
5	Mr. Tandin Wangdi	BAFRA	wangdida_6@yahoo.com
6	Mr. Sonam Yonten	BAFRA	syonten@moaf.gov.bt
7	Ms. Thinley Gyem	ARDC, Bajo	gyem.thinley@gmail.com
8	Mr. Jigme Tenzin	DoA	jigmetenzin@moaf.gov.bt
9	Mr. Kinley Tshering	DoA	kinleytshering@moaf.gov.bt
10	Mr. Ugyen Tshering	PPD	ugyentshering2@moaf.gov.bt
11	Mr. Tashi Dorji	CNR, RUB	dorjit@cnr.edu.bt
12	Mr. Mindu Dorji	OVC, RUB	mindudorji.ovc@rub.edu.bt
13	Mr. Jigme Dorji	UNDP	jigme.dorji@undp.org
14	Mr. Tshering Dorji	BAS	teba07@hotmail.com/basparo14@gmail.com

15	Mr. Sithar Wangdi	SFED, DOFPS	swangdi16@gmail.com
16	Mr. Deepak Rai	NSC, Paro	drai@moaf.gov.bt
17	Mr. Wang Tshering	NBC	wangtshering.nbc@gmail.com
18	Mr. Tshewang	NBC	kengkhar@gmail.com
19	Ms. Tashi Pelyang	NBC	tashi.pelyang@gmail.com
20	Ms. Jamyang Choden	NBC	jamyangchoden@moaf.gov.bt
21	Dr. Ronnie Vernooy	Bioversity International	R.VERNOOY@CGIAR.ORG
22	Ms. Pema Choden	NBC	paymacchoden@gmail.com
23	Mr. Chencho Dorji	NBC	dorjichencho@gmail.com
24	Mr. Gyeltshen	Driver	-
25	Mr. Nidup	Driver	-
26	Dr. Tashi Yangzome Dorji	NBC	Yangzome2011@gmail.com
27	Ms. Sonam Tshomo	NBC	sonamtshogs@gmail.com

Annex III:
Workshop Programme

Date: 29th September 2017
Venue: Metta Resort and Spa, Paro, Bhutan

Time (Hrs)	Agenda	Speakers
8.45- 9.00	Registration of the Participants	
9.00-9.05	Introductory Remarks	NBC
9.05-9.10	Remarks	Dr. Ronnie Vernooy
9:10- 9:30	Presentation on Community Seed Bank	NBC
9:30- 9:45	Discussion	
9.45- 10.15	Setting the scene: Nagoya Protocol, the ITPGRFA's multilateral system, the imperative of mutual supportiveness and national coordination challenges. Why mutually supportive implementation is important?	Dr. Ronnie Vernooy
10.15-10.30	Discussion	
10.30-11.00	Tea/Coffee Break	
11.00-11.15	Presentation on the background and achievements of GRPI project jointly implemented by Bhutan and Biodiversity International	NBC
11.15-11.30	Discussion	
11:30-12:15	Group work on case scenario A,B C and D	Dr. Ronnie Vernooy

12:15- 13:00	Presentation by the Groups	
13.00-14.00	Lunch break	
14.00-15.00	Group work E,F,G and H	Dr. Ronnie Vernooy
15.00-15.30	Tea/coffee break	
15.30-16.30	Presentation of the group work	
16.30-17.00	Concluding remarks	Dr. Ronnie Vernooy
17:00	Closing	NBC

National Biodiversity Centre,
Ministry of Agriculture & Forests,
Serbithang, Thimphu, Bhutan
PO Box: 875
Tel: +975-2-351417/351218
Fax: +975-2-351219
Email: info@nbc.gov.bt