

A National Seminar on the sharing of experiences on the implementation of the Access and Benefit Sharing (ABS) regime in Bhutan

June 8, 2018

Norkhil Boutique Hotel and Spa



Seminar Report

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June 8, 2018 Thimphu Bhutan

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

Authors: Mani Prasad Nirola, (Sr. Biodiversity Officer) and Chencho Dorji (Sr. Biodiversity
Officer), National Biodiversity Centre

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National Biodiversity Centre: National Biodiversity Centre (NBC) under the Ministry of Agriculture and Forests is the national focal point for the Nagoya Protocol on ABS in the country. NBC is also the national focal point for the Article 8 (J) of the Convention on Biological Diversity (Traditional knowledge). NBC has been implementing the ABS regime in the country and is the project management unit for the project “Implementing the Nagoya Protocol on Access to genetic resources and fair and equitable sharing of benefits arising from their utilization (NPIF)” in Bhutan.

Menjong Sorig Pharmaceutical Corporation Limited: Menjong Sorig Pharmaceutical Corporation Limited (MSPCL) is the state owned enterprise that produces the traditional medicine in Bhutan. MSPCL is one of the project implementation partner for the NPIF project.

Bio Bhutan: Bio Bhutan is a national private company mainly producing the organic nature based products in Bhutan. Bio Bhutan is one of the project implementation partner for the NPIF project.

UNDP CO Bhutan: UNDP CO Bhutan is a development partner in Bhutan and is the collaborating partner for the NPIF project. The NPIF project which is funded by Global Environmental Facility is routed through the UNDP CO Bhutan.

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Acronyms used in this document

ABS Access and benefit sharing

CBD Convention on Biological Diversity

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Welcome, introduction of participants and seminar programme

June 8 2018: NBC has been spearheading the implementation of the project ‘Implementing the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Bhutan’ since 2014 through UNDP-GEF funding. As part of the project, there are three pilot ABS agreements led by NBC, MSPCL and Bio Bhutan with the local communities of Loggchina Gewog in Chhukha, Langthel Gewog in Trongsa and Lingzhi and Dagala Gewogs in Thimphu to strengthen and mainstream ABS regime in Bhutan. As a result of these three ABS agreements, nine nature-based products were developed and were launched in April 2018. During the course of implementing the ABS project, there were lot of experiences, lessons learnt, opportunities and challenges faced by the different stakeholders. Therefore, a national seminar was held on 8th June 2018 to bring together all the stakeholders involved in the project and the implementation of ABS for sharing of experiences. The seminar was expected to build partnership between the local communities, private sectors, researchers and the ABS authorities involved in research and product development from biological resources and associated traditional knowledge in the country.

The seminar was attended by 27 participants representing, UNDP CO Bhutan, MSPCL, Bio Bhutan, Department of Agriculture, National Organic Program, ARDC Yusipang, Department of Agriculture, Bhutan Chamber of Commerce and Industry, Norbu Healing Centre, Mountain Mist, Bhutan Cordyceps, Bhutan Organics, Thimphu Teck Park Limited and members of the Dzom Dagan Ngomen Tshogpa, Dagala, Thimphu Bhutan¹. The seminar was facilitated by the officials from NBC. NBC organized the workshop with financial support from the NPIF project supported by GEF-UNDP Bhutan.

¹ see Annex 1 for the list of individual participants



Figure 1: Mr. Chencho Dorji, project Manager, NPIF Project, NBC delivering the welcome speech during the seminar

Organization of the Workshop Programme

The seminar was designed in such way that is it is enriching and interactive². On the onset of the workshop, the Program Director, NBC and Portfolio Manager, UNDP CO Bhutan gave an opening remarks. Following the opening remarks, an ABS documentary³ was screened to the participants in order to have a fair idea on the concept of ABS. The screening of the ABS documentary was followed by the two power-point presentations on ABS by NBC and the photo session.

During the course of the program, there were also presentations from the project implementing partners and the representative of the Jom Dagam Ngomen Tshogpa. After each presentation, the floor was opened for discussions, and question and answer session.

During the programme, nine ABS products developed by the project implementing partners were displayed. This gave a platform for the partner to showcase and market their products, since potential users of the products were present in the seminar.

² See Annex 2 for the seminar programme

³ The ABS documentary is developed by NBC as an awareness material and it briefly explains the concept of ABS and the ABS regime in Bhutan

1. Background

Conservation of biological diversity has always played a pivotal role in Bhutan's development history and concern for the natural environment and biological diversity is deeply embedded in Bhutanese traditional beliefs, socio-cultural outlook and the overarching development philosophy of Gross National Happiness (GNH). As a result, Bhutan has emerged virtually unscathed in the twenty first century in terms of its biological wealth which have been protected due to the wise and far-sighted leadership, sound policies and inherent respect for nature by the Bhutanese people. Due to the rich diversity of medicinal plants, a strong tradition of use emerged resulting in the vast store of traditional knowledge held by local communities on the use and properties of these biological resources. In spite of the rich biological diversity in the country, it has become increasingly important maintain these rich biodiversity for times to come with the rapid socio-economic development of the country. There is a need to incentivize and ensure the continuity of biodiversity conservation through research and commercial utilization and the securing of fair and equitable sharing of benefits arising from such activities. The benefits can be monetary, such as sharing royalties when the resources are used to create a commercial product, or non-monetary, such as the development of research skills and knowledge.

Bhutan became a party to the CBD in 1995 after the ratification by the 73rd session of parliament of Bhutan. Bhutan ratified the Nagoya protocol on Access and Benefit Sharing in 2012 after ratification by the 9th session of the 1st parliament of Bhutan. Both the CBD and the Nagoya Protocol are designed to help prevent the misappropriation of genetic resources and associated traditional knowledge by requiring that such resources of the country of origin are accessed with prior informed consent and subject to mutually agreed terms and benefit sharing. CBD and Nagoya protocol ascertain countries a sovereign rights over their genetic resources, which were considered as a 'common heritage of mankind' before 1992.

The Nagoya Protocol in particular, provide an international framework that seeks to ensure the fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge with countries and communities who have conserved and nurtured such resources and knowledge. In order for Bhutan to secure the economic benefits arising from the utilization of its genetic resources and associated traditional knowledge through the national implementation of the Nagoya Protocol, clear policy directives are critical. An Access and Benefit

Sharing Policy 2015 was adopted and the existing Biodiversity Act of Bhutan 2003 was revised to align with the ABS policy, Nagoya Protocol and latest international development on ABS.

To further the implementation of the Nagoya Protocol at the national level, Bhutan has been successful in securing a funding support from Global Environment Facility (GEF) United Nations Development Programme Bhutan. The project has three components.

Component 1- Strengthen National Regulatory and Institutional Framework on ABS

This component supported strengthening of the national ABS regulatory framework in compliance with the Nagoya Protocol and the ABS policy of Bhutan.

Component 2 - Capacity building and awareness raising for implementation of the National ABS Framework

This component focused on building the capacity of the Bhutanese researchers in the field of ABS and bioresearch and development.

Component 3: Piloting agreements on ABS

This component focused in piloting ABS agreements in the manner that is compliant with the Nagoya Protocol. The three pilot agreements were led by NBC, MSPCL and the Bio Bhutan.

A bipartite ABS agreement between the government and the local community (Pilot 1): This is an ABS initiative implemented by NBC with the *Dzedokha Phacheng Detshen*, a local community holding traditional knowledge related to a local ginger species, through the Nagoya Protocol Implementation Fund project funded by GEF-UNDP. In this ABS agreement, NBC is the user accessing the genetic resource and associated TK from the provider, who is the *Dzedokha Phacheng Detshen* for developing wellness products.

A tripartite ABS agreement between two government entities and the local community (Pilot 2): This is also an initiative implemented with support from the GEF-UNDP funded NPIF project wherein NBC and Menjong Sorig Pharmaceuticals Corporation Ltd. (MSPCL) are partnering with two local community groups called *Namther Throgmen Tshogpa* and *Tserim Yugel Sngomen Tshogpa*. MSPCL has access to three different plant species for the production of natural products.

A tripartite ABS agreement between the government, a national private company and the local community (Pilot 3): This is also an initiative supported by the GEF-UNDP funded NPIF project wherein Bio Bhutan has access to the leaves of a *Rhododendron sp.* supplied through a local community group called *Dzomdagam Ngomen Tshogpa* facilitated by NBC for natural product development.

During the course of implementing these pilot ABS agreements, there were lot of experiences, lessons learnt, opportunities and challenges faced by the different stakeholders. Therefore, a national seminar was held on 8th June 2018 to bring together all the stakeholders involved in the project and the implementation of ABS for sharing of experiences. The seminar provided a platform to build partnerships between the local communities, private sectors, researchers and the ABS authorities involved in research and product development from biological resources and associated traditional knowledge in the country.

2. Presentation on ABS and ABS regime in Bhutan

2.1 Introduction to ABS Concept

ABS refers to the way in which genetic resources and/or associated traditional knowledge are accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries providing it (providers). It is based on the principle of a PIC being granted by a provider to a user and MAT that ensure that the benefits from the use of genetic resources and/or associated traditional knowledge are shared equitably as enshrined in the CBD and the Nagoya Protocol. The concept of ABS came to the forefront during the process of negotiations for the CBD in 1992. Prior to that, biodiversity was considered as a ‘common heritage of humanity’, and genetic resources and/or associated traditional knowledge was often taken by companies and academic institutions from communities for research and development. Inventions were made, patented and benefits were enjoyed by these companies/countries without being shared with the communities from where the genetic resources and/or associated traditional knowledge was accessed. This monopolization of benefits created friction between the providers and users thus restricting access to genetic resources and/or associated traditional knowledge. After the adoption of the CBD in 1993, a new paradigm emerged wherein individual countries could affirm their exclusive rights to regulate and set up conditions for the access and use of their biodiversity, particularly their genetic resources and/or associated

traditional knowledge through access and benefit sharing regulations contrary to the so-called concept of the ‘common heritage of humanity’. By recognizing the sovereign rights of states over their resources, and requesting users to share benefits from the use of those resources, the CBD created a mechanism which enabled states to secure additional resources to support conservation and sustainable use of biodiversity. The provisions that establish the foundation for ABS are laid out in Article 15 of the CBD which mandates that “*each contracting party should create systems that facilitate access to genetic resources for environmentally sound purposes and ensure that benefits resulting from their use are shared fairly and equitably between users and providers*”. It recognizes the sovereignty of states over their biological diversity and provides that access to biological/genetic resources shall be subject to the prior informed consent of the Contracting Party providing such resources. It also states that access shall be based on mutually agreed terms in order to ensure the sharing of benefits arising from the commercial or other utilization of these genetic resources with the Contracting Party providing such resources. Although the CBD was adopted in 1992, the work to operationalize the provisions of CBD especially the third objective began only by 1999. The ‘Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization’ was adopted as a voluntary guidelines during the 6th Conference of Parties (COP) meeting at Bonn, Germany in 2002. The Bonn Guidelines aimed to assist/guide contracting parties to develop national legislative, policy and administrative measures to implement access and benefit sharing at domestic level. The Bonn Guidelines was the first step towards implementing the third objective of the CBD. Although the guidelines provided guidance in developing national measures, they were voluntary guidelines and not legally binding. Thus, during the 7th COP meeting in 2004, the Ad-Hoc Open-ended working group was formed to negotiate an international legally binding instrument on ABS. After six years of intense negotiations, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their utilization was finally adopted during the 10th COP meeting at Nagoya, Japan in 2010. The Protocol entered into force during the 12th COP meeting at Pyeongchang, South Korea in 2014 and has 107 Parties including Bhutan. The Nagoya Protocol builds on the ABS provisions of the CBD and further offers a transparent legal framework to support the implementation of its third objective: fair and equitable benefit sharing.



Figure 2: Seminar in progress

2.2 Policy and legal landscape o ABS

At an international level, the CBD, the International Treaty on Food and Agriculture (ITPGRFA) and the Nagoya Protocol. At a national level, ABS Policy of Bhutan 2015 and the Biodiversity Act of Bhutan 2003 are the main legislations the supports implementation of ABS in Bhutan. These are the legal frameworks which governs implementation of ABS in Bhutan.

2.3 Institutional arrangement for the implementation of ABS in Bhutan

As a measure to establish an institutional framework to facilitate implementation of ABS in Bhutan following institutional arrangements (figure 4) have institutionalized.

Competent National Authority (CNA): The Ministry of Agriculture and Forests, Royal Government of Bhutan is the Competent National Authority for discharging the functions conferred on it through the Secretary and is the final authority on access proposals.

National Focal Point (NFP): The National Biodiversity Centre, Ministry of Agriculture and Forests is the National Focal Point and the first contact point for access proposals. It receives, reviews and processes access proposals as well as makes information on ABS available for users and liaises with the CBD Secretariat in matters pertaining to Nagoya Protocol as required by the Article 13 of the Nagoya Protocol⁶.

Clearing House-Publishing Authority: The National Biodiversity Centre, Ministry of Agriculture and Forests is the designated Clearing House-Publishing Authority for information

related to access and benefit sharing in Bhutan as required by the Article 14 of the Nagoya Protocol.

ABS Checkpoints: The Department of Intellectual Property, Bhutan Agriculture and Food Regulatory Authority and the National Biodiversity Centre are the designated checkpoints to monitor and support compliance of ABS requirements in line with the requirements of Article 17 of the Nagoya Protocol. The designated checkpoints will collect/receive information related to access and utilization of genetic resources and/or associated traditional knowledge ranging from prior informed consent, source of the genetic resources/associated traditional knowledge to establishment of mutually agreed terms and make such information available to the National Focal Point, the Competent National Authority and to the ABS Clearing House, as appropriate.

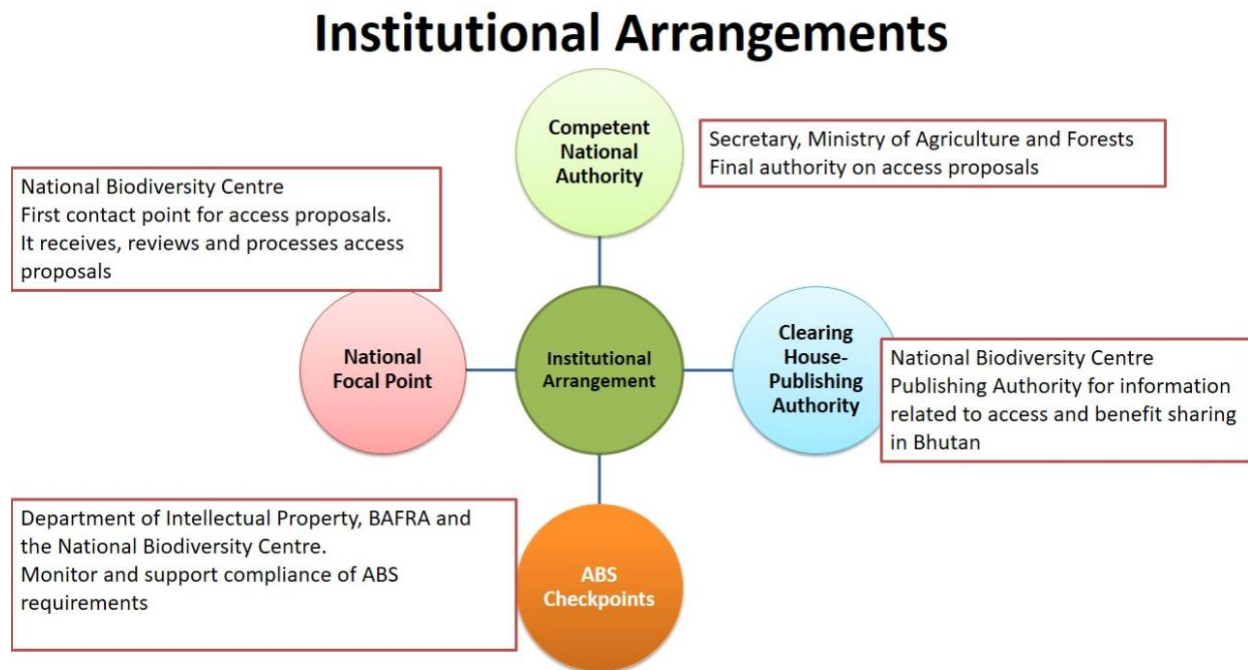


Figure 3: an Institutional arrangement for the implementation of ABS in Bhutan

2.4 ABS Model

The ABS of Model of Bhutan aims to enhance and empower local communities, and promote peoples’ participation and leadership in conservation through the benefits accrued from the ABS regime. This, in turn, will contribute to the conservation of biological diversity and associated traditional knowledge thereby maintaining rich biological diversity and associated traditional knowledge.

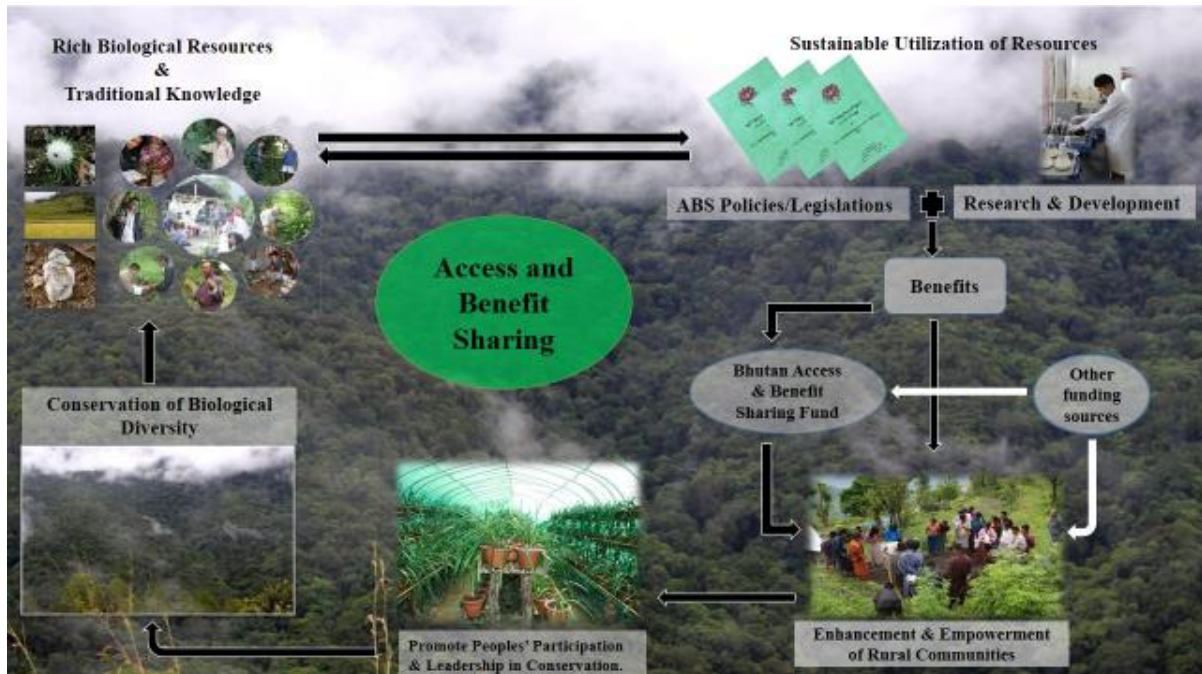


Figure 4: Illustration of ABS model of Bhutan

2.5 Providers of genetic resources and/or associated traditional knowledge identified as per the ABS legislation in Bhutan

While the state maintains sovereign rights and authority over the management of its genetic resources and recognizes the rights of holders of Traditional Knowledge, the following are identified as the provider of genetic resources and/or associated traditional knowledge within the ABS framework.

Department of Forests and Park Services: The Department of Forests and Park Services is the provider of the genetic resource from government reserved forests and/or the protected area system.

Community Forest Management Group: A Community Forest Management Group is recognized as the provider when the genetic resource is accessed from a community forest.

National Focal Point in consultation with the relevant community custodians or individuals: The National Focal Point in consultation with the relevant community custodians or individuals is the provider for in-situ genetic resources for food and agriculture and genetic resources from private forestry.

National Focal Point: The National Focal Point is the provider when the genetic resources are from ex-situ collections such as national gene banks, botanical gardens, national herbarium etc. In

the event that a provider of genetic resources and/or associated traditional knowledge is not identifiable, the National Focal Point is deemed to be the provider.

Local Community: A local community is the provider of traditional knowledge held within a community unless an individual is recognised as the holder of the knowledge by that community. In cases where the traditional knowledge associated with genetic resources is held by more than one community, these communities are recognised as joint providers of traditional knowledge. Where there is no identifiable provider, the National Focal Point is deemed to be the provider.

2.6 Access to Bhutanese genetic resources and/or associated traditional knowledge

Access to Bhutanese genetic resources and/or associated traditional knowledge for research and commercial utilization is guided by the Access and Benefit Sharing Policy of Bhutan 2015 and Biodiversity Act of Bhutan 2003. Access is divided into two phases: a Scoping Phase and an Actualization Phase with differing conditions for each phase.

Access to Bhutanese GR and/or associated TK

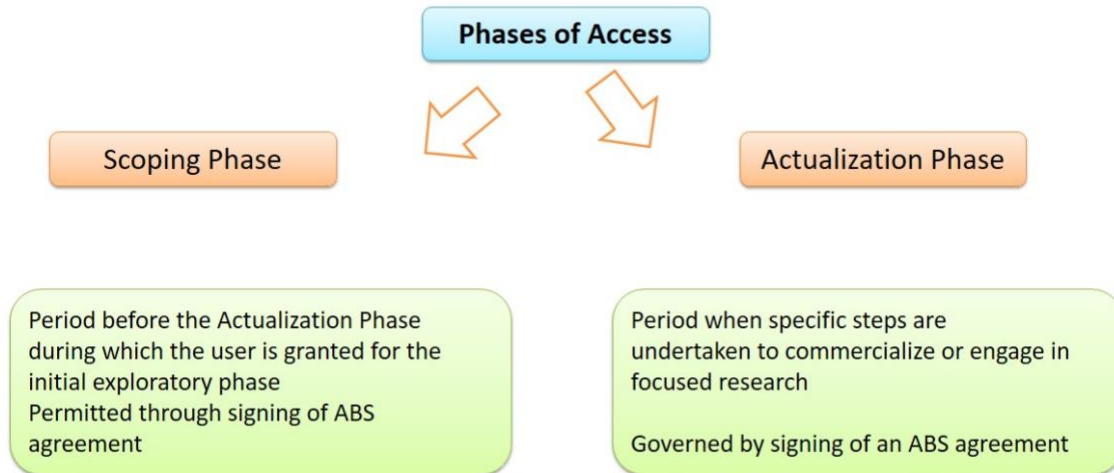


Figure 5: Phases of access to Bhutanese genetic resources and traditional knowledge

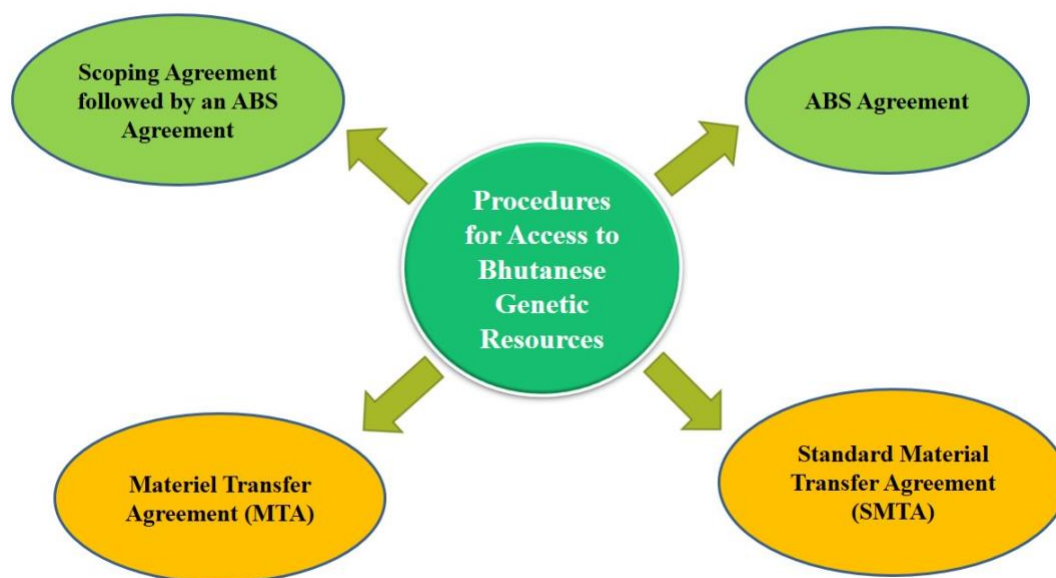


Figure 6: Procedures for the access

Thus, any user seeking access to the genetic resources and/or associated traditional knowledge has to submit an access proposal to the National Focal Point, who will review and assess the proposal for submission to the Competent National Authority for appropriate action. If the access proposal is rejected, the National Focal Point will communicate the decision to the user. If the access proposal is approved, the National Focal Point will facilitate access through execution of one of the following agreements. 1. Scoping Agreement; 2. ABS Agreement; 3. Material Transfer Agreement; 4. Standard Material Transfer Agreement. The Scoping agreement, ABS agreement and Material Transfer agreement are model agreements that have been developed and used for implementing ABS in the country. Each agreement contains clauses which are termed ‘model contractual clauses’, which are the minimum requirements that should be included in these agreements to allow access and utilisation of genetic resources and/or associated TK.

2.7 National mechanisms to monitor and track Bhutanese genetic resources and associated traditional knowledge

Following national mechanisms are instituted for the monitoring and tracking of Bhutanese genetic resources and associated traditional knowledge.

Designation of ABS Checkpoints: The National Biodiversity Centre, Department of Intellectual Property and Bhutan Agriculture and Food Regulatory Authority are the designated ABS checkpoints. The designated checkpoint will monitor the access and utilization of Bhutanese

genetic resources at the checkpoints. They will check relevant document that proves the genetic resources and associated traditional knowledge are accessed legitimately with compliance to the ABS legislation.

Issuance of Certificate of Compliance: The Competent National Authority issues a certificate of compliance to the user, through the National Focal Point. A certificate of compliance serves as evidence that the genetic resources and associated traditional knowledge have been accessed in accordance with the provisions of the ABS legislation in the country. This certificate is equivalent to the Internally Recognized Certificate of Compliance (IRCC) of the Nagoya protocol.

Sample Transfer Certificate: A Sample Transfer Certificate is a certificate issued by the National Focal Point to accompany the transfer of samples of genetic material out of the country once access has been granted under any one of the following procedures: a Scoping Agreement, an Access and Benefit Sharing Agreement, a Material Transfer Agreement or a Standard Material Transfer Agreement under the ABS regime. Such a certificate along with the samples to be transferred should be presented at the designated checkpoints or any other relevant organization.

3. Screening of ABS Documentary

The ABS documentary developed by NBC in collaboration with Bhutan Broadcasting Service was screened to the participants of the seminar to set the stage for the seminar. A 12 minutes documentary is prepared in the national language (Dzongkha) with the English subtitle. The documentary is prepared as the awareness material targeting people from all walk of life from local communities to a policy makers. The documentary comprehensively introduces the concept of ABS and delve detail into the ABS regime of Bhutan.

4. Display of the ABS products developed by the partners involved in the implementing of the ABS agreement under the NPIF project

As a result of piloting ABS agreements, a total of nine products were developed under the ABS framework. These products were displayed during the seminar. The display of products during the seminar was mainly to showcase the achievement of project as well as market the products since potential users of the products were also present in the seminar. Various posters and fliers regarding the project and products were also displayed during the seminar.



Figure 7: Display of ABS products during the Seminar at Norkhil Boutique Hotel and Spa

4.1 Products developed by NBC in collaboration with Dzedokha Phacheng Detshen, Loggchina, Chhukha

- Zhinor Massage balm:** With naturally grown *Zingiber cassumunar* essential oil as the main ingredient, this balm is made from other ingredients. This product was developed based on the traditional knowledge of the community. It helps in relieving joint and muscle pain. This product comes with the two sizes: 60 grams and 120 grams
- Zhinor Massage Liniment Oil:** This product is also developed from the *Z. cassumunar* essential oil as the main ingredient. This product also has properties similar to Zhinor massage balm.



4.2 Products developed by MSPCL in collaboration with Namther Menrig Tshogpa, Langthel, Trongsa, and Tsherim Yugel Ngomen Tshogpa, Lingzhi, Thimphu

- **Zephel Himalayan Gooseberry Anti-wrinkle Cream:** It is developed from the Himalayan goose berry (*Phyllanthus emblica*) fruit as the main ingredient. It is one of the richest sources of Vitamin C and exhibits strong anti-oxidant activity. It is widely believed to tonify the body and increase vitality. If this cream applied the face, hands or body twice a day, it will help improve visco-elasticity of your skin.
- **Zephel Rhododendron Hand Sanitizer:** The main ingredient of this product is the extract of *Rhododendron anthopogon* collected from the *Tsherim Yugel Ngomen Tshogpa, Lingzhi, Thimphu*
- **Zephel Soapnut Hand-made Soap:** This soap is made from the extract of the fruit of the *Sapindus rarak* (soapnut) as the main ingredient.
- **Zephel Turmeric Hand-made Soap :** This soap is made from the extract of the rhizome of the *Curcuma longa* (turmeric) as the main ingredient.



4.3 Products developed by NBC in collaboration with Daga Ngomen Tshogpa, Dagala Thimphu

- **Hand-made Soap:** This soap is made from the essential oil of the leaves of the *Rhododendron anthopogon* as the main ingredient.
- **Dri zang Perfume:** This perfume is made from the essential oil of the leaves of the *Rhododendron anthopogon* as the main ingredient along with sandalwood oil, citrus oil etc.
- **Tsa Lung Massage oil:** This massage oil is made from the essential oil of the leaves of the *Rhododendron anthopogon* as the main ingredient along with mustard oil, sunflower oil etc. It is a soothing massage oil which nourishes body and calms mind.



5. Presentation on the sharing of experiences on the implementation of ABS regime in Bhutan

5.1 Bio Bhutan

Achievements

Mr. Nobin Gurung, Project Focal Point from Bio Bhutan presented the progress made in the pilot III of the project led by Bio Bhutan as below;

- Resource inventory and survey for *R. anthopogon* growing areas were successfully conducted at Soe, Naro, Lingzhi and Dagala Gewogs under Thimphu Dzongkhag. The trail distillation of the samples collected was done at Begana and also on laboratory scale using the facility at MSPCL.
- After selecting Dagala Gewog as the project site, successful community consultations and ABS awareness meetings were held with the members. Eight member team including three from Dagala community visited Nepal to study and observe *R. anthopogon* distillation sites and extraction methods used.
- Essential oil Expert (consultant) from Nepal was hired and he visited collection sites at Dagala to conducted feasibility study and further advice on the distillation equipments to be used.
- Sample oil extracted during trail distillation was sent to Primavera Life GmbH (collaborator) in Germany and successful laboratory assessment of its chemical properties and composition were done.
- With advice from the Nepal consultant, a Sustainable Harvesting Guidelines/ manual for *R. anthopogon* was developed.
- An electric steam distillation unit (150 kgs capacity) was procured from China and installed at Begana. The community members were trained on Sustainable harvesting of *R. anthopogon* leaves and its quality control at Wangdo (collection site in Dagala). With the leaves collected they were further trained on using the electric steam distillation unit at Begana to harvest essential oil.
- ABS model and ABS agreement with the community was developed. The agreement was later signed between NBC, Bio Bhutan and the Dagala Community.

- Four staff from Bio Bhutan was trained on product development at Mae Fah Luang University, Thailand and Primavera Life GmbH, Germany.
- 58 members of the community were further trained on sustainable harvesting methods and they collected 2 tonnes of *R. anthopogon* leaves in 2 days. They were paid Nu. 160/- per Kgs on site.
- The *R. anthopogon* leaves and essential oil extracted from the 3 collection sites namely Dungdo, Wangdo and Gaytalha under Dagala gewog was Certified Organic as per EU standards. The certification also mandates that the GR is sustainably harvested.
- Three products; Handmade soap, Tsa Lung Massage Oil and Dri Zang perfume were developed and were officially launched on 5th April, 2018 at Hotel Taj Tashi by H.E. Prime Minister of Bhutan. Officials from Bio Bhutan visited Thailand, Singapore and India for marketing of the products.

Mainstreaming ABS in Bio Bhutan’s work

Mr. Nobin said *“The project ‘Implementing the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Bhutan’ is a very unique project that Bio Bhutan has implemented. Until now Bio Bhutan has been buying raw materials (Genetic Resources) from farmer groups and community after paying them premium price. Never before have we ploughed back a share of our profit back for the benefit of the groups”*. He also mentioned that 76 member of the Dagala community have been very much interactive and cooperative in all of the project activities involving them. The community embraced the concept of ABS and expressed their willingness to provide *R. anthopogon* from their community forest. They were willing to follow the sustainable harvesting methods and in most of the meetings and trainings women participants were impressive. He further informed the gathering that the Bio Bhutan in consultation with NBC and Dagala community has framed the ABS model through the signing of an ABS agreement. According to the agreement, it was agreed that the Bio Bhutan plough back 9% of annual gross ex-factory sales profit to the community of which 2% will go to the Bhutan Access and Benefit Sharing Fund. He also said that *“In future Bio Bhutan would like to follow such model while accessing Genetic Resources from local communities”*.

Experiences

- The project as a whole was new and unique to Bio Bhutan; we have gained a lot of experience implementing such a project.
- Members of the Dagala Community and Bio Bhutan staffs are now conversant with the Nagoya Protocol and the concept of ABS.
- Bio Bhutan learnt on interacting and developing community protocol which is in line with the Nagoya Protocol and ABS regime.
- Bio Bhutan received immense support working on the project from our PSC and our partner PMU's, NBC and MSPCL. Their guidance has shown us how a Government agency, SOE and private sector can work together on a particular objective.
- Bio Bhutan could anticipate and work on accessing new GR (*R. anthopogon*) using modern technology.
- Bio Bhutan could learn on developing new products in cosmetics line

Challenges

- Drafting of the project proposal was challenging as Nagoya Protocol and the ABS concept was new concept to Bio Bhutan.
- Implementing the project activities as per the timeline and work plan was often difficult due to some unforeseen circumstances.
- Bio Bhutan being a private firm, it was a challenge for us to work in according to the RGOB system in terms of protocol, budget and accounting.

Opportunities

- Members of the Dagala community and Bio Bhutan staffs received capacity development training on sustainable harvesting methods for wild collection and essential oil distillation techniques.
- Bio Bhutan staff were trained on developing new cosmetic products.
- The project gave avenue for Bio Bhutan to develop community protocol on the ABS regime.
- In the field of Natural and Organic products, the project also provided opportunity for Bio Bhutan to explore new markets in both domestic and international.
- Apart from capacity development of members and staff, the project also helped Bio Bhutan in infrastructure development.

5.2 MSPCL

Mr. Samten on behalf of MSPCL presented the achievements, and lesson learnt from the NBC led pilot ABS agreement. The detail is as follows;

Achievements

- An ABS agreement was signed with the Namther Menrig Tshogpa, Langthel gewog for the access of *Phyllanthus emblica* and *Sapindus rarak* for anti-wrinkle cream and soapnut soap.
- An ABS agreement was signed with Tserim Yuegyel Sgno-men Tshogpa, Lingzhi gewog for the access of the *Rhododendron anthopogon* (leaves) for hand sanitizer.
- As per the agreement, the monetary benefit is 5% to each community group while 2% is for BABS fund. The non-monetary benefit are like training of sustainable collection and post-harvest care, study tour, assured buy back guarantee and provide collection tools
- 36 officials were trained in research and development related to nature based product development.
- The Research and development equipment such as SPF Analyzer, Vacuum Dryer, Homogenizer, Cutometer, Triple sense, Colorimeter and Digital Microscope (portable) were procured through the support of the project.

Opportunities

- In promoting sustainable use or harvesting of medicinal plants by mainstreaming ABS framework in TM production.
- In subsidization of essential traditional medicine production and promoting and developing natural/herbal industry.
- As a main or alternative livelihood for local communities.
- New drug discovery and promotion of research in traditional knowledge and genetic resources.
- Promotion and preservation of ancient sowa rigpa science.

Challenges

- Limited capacity and resources as researches and product development are both resource intensive and highly technical.
- Difficult to model the framework as it may not fit all sizes and areas.

- No immediate results or deliverables to community partner and this may deter their participation – very long R&D (scoping phase) to actualization
- International market accessing and huge development cost- while market potential exist in Asia region where Asian medicine systems are highly valued/developed but not all can be accessed due to restriction.
- Huge market exist for traditional medicine/herbal products in Mainland China, Hongkong and Taiwan are restricted /controlled for accessing although ABS concept/framework can be easily sold. However this may not be the case for private entrepreneurs but for MSPCL this is one of the main challenges.

5.3 NBC

Mr. Chench Dorji, Project Manager of the NPIF project presented the achievements, and lesson learnt from the NBC led pilot ABS agreement. The detail is as follows;

Achievements

- ABS awareness and capacity building of the group members, followed by cultivation trials was one major area in the R & D phase in order to validate the associated traditional knowledge as well as calculation of the essential oil yield and product formulation was the other key area.
- With support of Herbanext Lab, Philippines, TK was validated and a formulation was developed, furthermore high oil yield was achieved with the use of state of art distillation unit at Bio Bhutan.
- Within the span of four years the team managed to increase the cultivation to 6000 kgs of zingiber from initial seed of 15 kgs. In addition, the team also supported the development of community protocols and then signed an ABS agreement specifying the benefit sharing conditions after the successfully developing Zhinor line of products which included massage oil and liniment oil. Zhinor means “Jewel for Peace”

5.4 Representative of Jom Dagam Ngomen Tshogpa

Mr. Namgay Wangchuk, Chairman of the Jom Dagam Ngomen Tshogpa along with two other members of the group participated in the seminar. Mr. Namgay representing the group expressed his gratitude to Bio Bhutan for involving them as a partner in the Bio Bhutan led pilot ABS agreement. He also expressed his gratitude for NBC is supporting the group in the capacity

building on ABS agreement negotiations. He informed the gathering that through the support of the project, the community has benefited a lot in terms of building a capacity of the members in the process involved in the value chain of the nature based product development as well as in the sustainable harvesting of natural resources especially *Rhododendron anthopogon*. He expressed that the monetary benefits they got from the sale of Rhododendron flowers to Bio Bhutan is useful in supporting their household needs. Mr. Namgay said “*it has been a good learning experience working on this project with Bio Bhutan, NBC and UNDP, we look forward to similar opportunities to work together in future*”.



Figure 8: Mr. Namgay Sharing his experience working with Bio Bhutan in ABS pilot agreement.

6. Discussions

- Representatives from the private sectors such as healing centers informed the floor that, they have been procuring many spa products from Thailand and other neighboring countries since they didn't know about the products developed in Bhutan. They stated that since now Bhutan has produced many spa and wellness products it gives opportunity for them to use our won 'Bhutanese' products for the spa, wellness and healing services.
- Some participants expressed their confusion on the difference between ABS and Bio-trade. Towards this, representatives from NBC clarified the key differences between ASB and Bio-trade.

- Some members raised concern about the ABS monopolizing and benefiting only the company and obstructing the opportunities for other aspiring companies to work on similar genetic resources giving an example of lemon grass. Towards this, representatives from NBC clarified that ABS provides an opportunities for companies rather than hindering and monopolizing the business. ABS secures the interests of the communities as well as companies.

Annex 1: An agenda for the seminar

9.30 AM	Registration of Participants
10 AM	Welcome <i>NBC</i>
10.05 AM	Opening remarks <i>NBC and UNDP</i>
10.15 AM	Introduction of participants
10.20 AM	Introduction to ABS <i>NBC</i>
10.35 AM	Photo session and Tea Break
11 AM	Screening of ABS awareness documentary
11.20 AM	Closer look at the ABS Regime of Bhutan <i>NBC</i>
11.40 AM	Discussion or Q/A
12.10 PM	Experiences from implementing ABS in Dagala Community <i>BioBhutan</i>
12.30 PM	Discussion or Q/A
1 PM	Lunch
2 PM	Listening to the farmers say on ABS experiences <i>Jom Dagan Ngomen Tshogpa, Dagala, Thimphu</i>
2.10 PM	Mainstreaming ABS by MSPCL <i>MSPCL</i>
2.30 PM	Discussion or Q/A
3 PM	Tea Break
3.30 PM	Accessing <i>Zingiber cassumunar</i> and its TK from Loggchina community <i>NBC</i>
3.20 PM	Discussion or Q/A
3.50 PM	Vote of Thanks <i>NBC</i>



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