

Access and Benefit Sharing Policy of Bhutan

1. Introduction

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. The country has 70.46 percent of the total area under forest cover and 51.32 percent, secured as protected areas and biological corridors and is home to a diverse array of flora and fauna including 5603 species of vascular plants, 400 ferns, 200 mammals and over 700 birds. To date, over 300 species of medicinal plants are found at different altitudes ranging from 200 to 7800 meters above sea level. This is not surprising since Bhutan was traditionally and historically referred to as Lhomenjong, valley of medicinal herbs because of its fertility, mountains and diversity of medicinal plants. 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 to assess and implement measures to fulfill the constitutional mandate that requires a minimum of sixty percent of Bhutan's total land be maintained under forest cover for all time. While it is clear that the long history of conservation practices of Bhutan's rural communities, the local custodians have not been motivated by economic incentives but by strong spiritual and cultural bonds with their local ecosystems, it is important that these bonds are not frayed due to growing economic pressures. A balance between social, spiritual and economic wellbeing needs to be maintained to realize the conservation objectives of the Constitution of Bhutan and the Convention on Biological Diversity (CBD). While the balance between conservation and the social and spiritual wellbeing needs of the Bhutanese people have been historically maintained, more needs to be done to ensure that Bhutan's economic needs are effectively addressed. This can be done by securing the economic value of Bhutan's biological resources and associated traditional knowledge through facilitating their research and commercial utilization and ensuring the fair and equitable sharing of benefits arising from such activities.

In October 2010, the 193 Parties to the CBD at their 10th Meeting adopted the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (The Nagoya Protocol). This Protocol was developed in order to 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.

Therefore this Access and Benefit Sharing Policy is developed to guide access to Bhutan's genetic resources and associated traditional knowledge and ensure the fair and equitable sharing of benefits arising from their research and commercial utilization. It will also enable national capacity-building and contribute to the vision outlined in Bhutan 2020- A Vision for Peace, Prosperity and Happiness, that

encourages the wise use of natural resources as a development asset to contribute to the sustainable social and economic development of the country and the benefit of humankind.

Policy and legal environment

Article 1.12 of the **Constitution of the Kingdom of Bhutan** states that “the rights over mineral resources, rivers, lakes and forests shall vest in the State and are the properties of the State, which shall be regulated by law”. Further, Article 5.1 asserts that “ Every Bhutanese is a trustee of the Kingdom’s natural resources and environment for the benefit of the present and future generations and it is the fundamental duty of every citizen to contribute to the protection of the natural environment, conservation of the rich biodiversity of Bhutan and prevention of all forms of ecological degradation including noise, visual and physical pollution through the adoption and support of environment friendly practices and policies.” In addition, Article 5.2(c) requires the government to secure ecologically balanced sustainable development while promoting justifiable economic and social development.

The **Forest and Nature Conservation Act of Bhutan 1995** covers forest management, prohibitions and concessions in government reserve forests, forestry leases, social and community forestry, transport and trade of forestry produce, protected areas, wildlife conservation, soil and water conservation, and forest fire prevention. It however does not cover the research and commercial utilization of genetic resources and the fair and equitable sharing of benefits arising thereof.

The **Biodiversity Action Plans of 1998, 2002 and 2009** were amongst the earliest documents to recognize bioprospecting as one of the measures for the conservation and sustainable utilization of biological resources and stressed the need to develop a comprehensive policy and legal framework for research and commercial utilization of Bhutan’s genetic resources and associated traditional knowledge.

The **Biodiversity Act of Bhutan 2003** was enacted to regulate access to genetic resources and associated traditional knowledge prior to the adoption of the Nagoya Protocol on Access to genetic resources and the fair and equitable sharing of benefits arising from their utilization. However experience since 2003 and the adoption of the Nagoya Protocol in 2010 has triggered the need for a comprehensive access and benefit sharing policy for Bhutan that will guide the implementation and where required review of this Act.

Bhutan ratified the **Convention on Biological Diversity in 1995**. The Convention is the only international instrument comprehensively addressing biological diversity. The Convention’s three objectives are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising from the utilization of genetic resources.

The **Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization** was adopted during the 10th meeting of the Conference of Parties (COP10) to the CBD in 2010. The Protocol was adopted in order to further the implementation of the third objective of the CBD by providing a strong compliance mechanism that ensures the sharing of benefits arising from the research and commercial utilization of genetic resources and associated traditional knowledge with their countries of origin and community custodians.

2. Rationale

Bhutan is rich in biological resources being part of the Eastern Himalayan region which contains parts of three biodiversity hotspots and has been protected due to the wise leadership, policies and inherent respect for nature by the Bhutanese people.

The Bhutanese have an age old tradition of living in harmony with nature and as a result have accumulated rich traditional knowledge on the use of biological resources.

Conservation is becoming an increasing challenge with the rapid socio-economic development of the country. There is a palpable need to secure fair and equitable sharing of benefits from research and commercial utilization of genetic resources and associated traditional knowledge to enhance rural livelihoods, incentivize and ensure continuity of biodiversity conservation.

The existing pool of expertise in the field of biodiversity conservation is limited and there is a need to strengthen national capacity in order to develop a better understanding of our biological resources for effective conservation and sustainable utilisation.

As a member country to the CBD and signatory to the Nagoya Protocol on ABS, Bhutan has to develop laws on the fair and equitable sharing of benefits arising from research and commercial utilization of genetic resources and associated traditional knowledge.

3. Guiding Principles

The Access and Benefit-sharing policy of Bhutan is based on the following principles:

- a) There is an integral link between Bhutan's biological resources and associated traditional knowledge and the economic, social and spiritual wellbeing of the Bhutanese people who hold Nature in trust for the benefit of the planet and the current and future generations.
- b) The fair and equitable sharing of the benefits generated from the commercial and research utilization of Bhutan's genetic resources and associated traditional knowledge with its local custodians and the Bhutanese people as a whole will incentivize sustainable use and lead to the fulfillment of the conservation mandate enshrined in Article 5 of the Constitution of Bhutan.
- c) Access to and utilization of Bhutan's genetic resources and associated traditional knowledge should affirm the cultural and spiritual values of the Bhutanese people, and contribute to the wellbeing of the planet and the current and future generations.

4. Vision

The conservation and sustainable use of Bhutan's biological heritage through securing the economic, social and spiritual wellbeing of the Bhutanese people.

Incentivizing the conservation and sustainable use of Bhutan's biological heritage through a financing mechanism that secures the economic, social and spiritual wellbeing of the Bhutanese people.

5. Scope

The National ABS policy covers the research and commercial utilization of Bhutan's genetic resources, their derivatives and associated traditional knowledge.

This policy excludes biological resources when traded, shared, exchanged and used as commodities. If biological resources traded as commodities are later utilized as genetic resources for research and/or commercial purposes, such utilization shall be covered by the scope of this policy.

This policy further excludes the use, sharing and exchange of traditional knowledge within and between local communities. If such knowledge is utilized beyond its traditional context for commercial and/or research purposes, such use shall be covered by the scope of this policy.

6. Definitions

a) Genetic resources

Genetic resources for the purposes of this policy are all material of plant, animal, microbial or other origin containing functional units of heredity and include the biochemical composition of genetic resources, genetic information and derivatives.

b) Access to genetic resources

Access to genetic resources means the utilization of genetic resources from Bhutan irrespective of whether they are accessed in situ or ex situ for the purpose of conducting any research and/or development on the genetic and/or biochemical composition of genetic resources including through the application of biotechnology.

Access to genetic resources also includes the conducting of any research and development on derivatives of biological or genetic resources from Bhutan.

c) Access to traditional knowledge associated with genetic resources

Access to traditional knowledge means the utilization of traditional knowledge associated with genetic resources for the purpose of conducting any research and development.

d) Traditional knowledge associated with genetic resources

Traditional knowledge associated with genetic resources means the knowledge, innovations and practices of Bhutanese communities that is related to the utilization of biodiversity and is not limited to knowledge relating to genetic structure of biological resources.

e) Derivatives

Derivatives means naturally occurring biochemical compounds resulting from the genetic expression or metabolism of biological or genetic resources, even if it does not contain functional units of heredity.

f) Biotechnology

Biotechnology means any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use.

d) Community protocols

Community protocols means protocols developed through a participatory process based on customary laws and values by local custodians of Bhutan's genetic resources and/or associated traditional knowledge detailing at the minimum a clear process for acquiring their free and prior informed consent and establishing mutually agreed terms and benefit sharing with respect to any utilization of their resources and knowledge.

e) Scoping phase of utilization of genetic resources and/or associated traditional knowledge

The scoping phase of utilization of genetic resources and/or associated traditional knowledge is the initial exploratory phase of research and development with the aim of establishing market or research potential.

f) Actualization phase of utilization of genetic resources and/or associated traditional knowledge

The actualization phase of utilization of genetic resources and/or associated traditional knowledge refers to the phase when specific steps are undertaken to commercialize or engage in focused research on such resources and/or knowledge.

The actualization phase includes, but is not limited to applications for intellectual property rights, product testing and marketing.

No actualization phase of utilization of genetic resources and/or associated traditional knowledge can begin without an Actualization Permit issued by the Authorized Agency and an Access and

Benefit Sharing Agreement between the users and providers of the genetic resources and/or associated traditional knowledge.

g) Access and Benefit Sharing Agreement (ABS Agreement)

ABS Agreement means an agreement between the user and providers of genetic resources and/or associated traditional knowledge consisting of Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT).

h) Access and Benefit Sharing Fund (ABS Fund)

The ABS Fund shall mean a fund established to receive monetary benefits derived from the research and commercial utilization of Bhutan's genetic resources and/or associated traditional knowledge. The ABS fund shall also receive the processing fee and the cash deposit payable at the Scoping phase.

i) Actualization Permit

Actualization Permit means a permit issued by the Authorized Agency endorsing the ABS Agreement and formalizing the Actualization Phase.

7. Policy objectives

1. To secure the trusteeship of the Bhutanese people over their biological resources and associated traditional knowledge.
2. To augment and secure the value of Bhutan's genetic resources for conservation and sustainable use.
3. To promote long term mutually supportive relationships based on trust between the providers and users of Bhutan's genetic resources and associated traditional knowledge.
4. To regulate access to Bhutan's genetic resources and associated traditional knowledge.
5. To ensure fair and equitable sharing of the benefits arising from the commercial and research utilization of Bhutan's genetic resources and associated traditional knowledge.

8. Policy Measures

Policy objective 1: To secure the trusteeship of the Bhutanese people over their genetic resources and associated traditional knowledge.

1.1 Affirm and exercise the sovereign rights of Bhutan and the trusteeship of its people over its biological resources and associated traditional knowledge.

1.2 Support local communities to develop community protocols based on which they can grant prior informed consent (PIC) and negotiate mutually agreed terms (MAT) where they have established rights to grant access to genetic resources and/or associated traditional knowledge.

1.3 Recognize communities that have sustained genetic resources and/or associated traditional knowledge as the custodians of such resources and knowledge.

1.4 Strengthen national mechanisms to regulate research and commercial utilization of genetic resources and associated traditional knowledge of Bhutan.

1.5 Facilitate capacity development and public awareness on the value of Bhutan's genetic resources and associated traditional knowledge in the context of ABS.

Policy Objective 2: To augment and secure the value of Bhutan's genetic resources and associated traditional knowledge for conservation and sustainable use.

2.1 Secure maximum benefits from the commercial and research utilization of Bhutan's genetic resources and associated traditional knowledge by prioritizing a comprehensive genetic resource and traditional knowledge inventory and documentation.

2.2 Promote in-country research and commercial utilization of Bhutan's genetic resources and associated traditional knowledge through technology transfer and collaborative research to generate employment and build national competence.

2.3 Ensure that the benefits arising from the research and commercial utilization of Bhutan's genetic resources and associated traditional knowledge are directed towards the conservation and sustainable use of biodiversity and securing ecosystem services.

Policy objective 3: To promote long term mutually supportive relationships based on trust between the providers and users of Bhutan's biological resources and associated traditional knowledge.

3.1 Commit to being an ethical, reliable, committed and transparent partner who will provide full and easily accessible information about Bhutan's ABS requirements, facilitate a consistent process for access and do its utmost to fulfill its contractual obligations.

3.2 Explore the potential of developing a mutually beneficial and respectful, long-term relationship with a company or research institute, by identifying common interests and possible areas of conflict with Bhutanese values.

3.3 Ensure that the contractual agreement is governed by laws of Bhutan and any disputes arising are resolved primarily through negotiation and mediation in Bhutan using a mediator that both parties are in agreement with.

Policy objective 4: To regulate access to Bhutan’s genetic resources and associated traditional knowledge.

4.1 Ensure that access to Bhutan’s genetic resources and associated traditional knowledge is regulated in a clear and transparent manner by an Authorized Agency designated by the Ministry of Agriculture and Forests.

4.2 Promote access to Bhutan’s genetic resources and/or associated traditional knowledge to users that conform to the ethical and environmental standards of Bhutan and its people.

4.3 Access to genetic resources in areas declared and/or regarded as sacred will be limited to safeguard and uphold the unique spiritual and cultural relationships of the Bhutanese people with Nature.

4.4 Access to Bhutan’s genetic resources and/or associated TK shall be divided in two phases: a Scoping Phase and an Actualization Phase with differing conditions for each phase.

4.4.1 The Scoping Phase will require a Scoping Agreement with the Authorized Agency. The Authorized Agency, if satisfied with the information received from a user intending to engage in the Scoping Phase of utilization of genetic resources and /or associated traditional knowledge from Bhutan, shall issue such user with Scoping Permit. This Scoping Permit shall be in the form of an agreement between the Authorized Agency and the user and shall contain a set of conditions for utilization, including the condition to secure an Access and Benefit Sharing Agreement (ABS Agreement) and Actualization Permit prior to engaging in the Actualization Phase of utilization of such resources and/or knowledge. The Scoping permit will be conditional on the payment of a processing fee and a cash deposit returnable on the conclusion of the scoping phase.

4.4.2 The Actualization Phase shall require an Access and Benefit Sharing Agreement and an Actualization Permit issued by the Authorized Agency. The Actualization Phase shall be governed by an ABS Agreement between the users and the providers of genetic resources and/or associated traditional knowledge. The Authorized Agency where appropriate will provide oversight over negotiations between the users and the providers towards an ABS agreement.

4.5 The access to genetic resources from government reserved forests in the Actualization Phase will be based on an ABS agreement between the user of such genetic resources and the Authorized Agency.

4.6 The access to genetic resources from community forests in the Actualization Phase will be based on an ABS agreement between the user of such genetic resources and the communities managing these forests based on their community protocol and with the guidance of the Authorized Agency.

4.7 The access to duly registered *ex situ* collections of genetic resources for food and agriculture that fall under Annex-1 of the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) shall be in accordance with the Standard Material Transfer Agreement (SMTA) while the access to other genetic resources in *ex situ* collections in the Actualization Phase shall be based on an ABS Agreement between the user of such resources and the Authorized Agency.

4.8 The access to *in situ* genetic resources for food and agriculture in the Actualization Phase shall be based on an ABS Agreement between the Authorized Agency in consultation with the relevant community custodians and the users of such resources.

4.9 Access to traditional knowledge associated with genetic resources that is held within a community will be based on an ABS agreement between the community based on their community protocol with the guidance of the Authorized Agency and the user of such knowledge.

4.10 Access to traditional knowledge held by more than one community where feasible shall be based on an ABS agreement between the communities in accordance with their community protocols under the guidance of the Authorized Agency and the user of such knowledge. Where this course of action is not feasible the Authorized Agency shall enter into an ABS agreement on the communities' behalf.

Policy Objective 5: To ensure fair and equitable sharing of the benefits arising from the research and commercial utilization of Bhutan's genetic resources and traditional knowledge.

5.1 The Authorized Agency shall provide oversight to ensure fair and equitable sharing of benefits arising from research and commercial utilization of Bhutan's genetic resources and associated traditional knowledge.

5.2 The sharing of benefits arising from research and commercial utilization of Bhutan's genetic resources and associated traditional knowledge shall be based on the ABS Agreement and may include both monetary and non monetary benefits.

5.3 The ABS Fund shall be established to receive monetary benefits derived from the research and commercial utilization of Bhutan's genetic resources and/or associated traditional knowledge. The Fund shall be managed by the Authorized Agency which shall disburse the monies therein for the benefit of conservation and sustainable use of Bhutan's biodiversity and enhancement of rural livelihoods.

5.4 Monetary benefits arising out of the research and commercial utilization of genetic resources from government-reserved forests and ex-situ collections shall be channeled into ABS Fund.

5.5 A portion of the monetary benefits arising from the research and commercial utilization of genetic resources from community forestry including genetic resources related to food and agriculture developed and sustained by the communities, shall be channeled into the ABS fund.