

ACCESS AND BENEFIT SHARING IN TRADITIONAL KNOWLEDGE

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ACCESS AND BENEFIT-SHARING

WHAT IS ACCESS AND BENEFIT-SHARING?

Access and benefit sharing (ABS) alludes to the path in which hereditary assets might be gotten to, and how the advantages that outcome from their utilization are shared between the general population or nations utilizing the assets (clients) and the general population or nations that give them (suppliers).

WHY IS IT IMPORTANT?

Suppliers of hereditary assets are governments or common society bodies, which can incorporate private area proprietors and groups inside of a nation, who are qualified for give access to hereditary assets and offer the advantages coming about because of their utilization. The entrance and advantage sharing procurements of the Convention on Biological Diversity (CBD) are intended to guarantee that the physical access to hereditary assets is encouraged and that the advantages got from their utilization are imparted evenhandedly to the suppliers. Now and again this likewise incorporates profitable conventional learning connected with hereditary assets that originates from ILCs.

The advantages to be shared can be fiscal, for example, sharing sovereignties when the assets are utilized to make a business item, or non-money related, for example, the improvement of exploration abilities and learning. It is imperative that both clients and suppliers comprehend and regard institutional systems, for example, those delineated by the CBD and in the Bonn Guidelines. These offer governments to build up their own national structures which some assistance with ensuring that get to and advantage sharing happens in a reasonable and impartial way

HOW DOES IT WORK?

Access and benefit sharing depends on prior informed consent (PIC) being conceded by a supplier to a client and transactions between both sides to grow commonly concurred terms (MAT) to guarantee the reasonable and impartial sharing of hereditary assets and related advantages

. • Prior informed consent (PIC): is the consent given by the skillful national power of a supplier nation to a client before getting to hereditary assets, in accordance with a fitting national lawful and institutional structure. • Mutually concurred terms (MAT): is an assention came to between the suppliers of hereditary assets and clients on the states of access and utilization of the assets, and the advantages to be shared between both sides. ¹

These conditions are required under Article 15 of the CBD, which was received in 1992 and gives a worldwide arrangement of standards for access to hereditary assets, and in addition the reasonable and evenhanded conveyance of the advantages that outcome from their utilization.

WHO IS INVOLVED?

Suppliers of hereditary assets: States have sovereign rights over common assets under their locale. They are committed to put set up conditions that encourage access to these assets for ecologically solid employments. Suppliers concur terms, which incorporate PIC and MAT, for conceding get to and sharing advantages impartially. Laws inside of the supplier nation might entitle others, for example, indigenous and nearby groups (ILCs), to additionally arrange terms of access and advantage sharing. The interest of ILCs is fundamental in occurrences where conventional learning connected with hereditary assets is being gotten to. Clients of hereditary assets: Users are in charge of sharing the advantages got from hereditary assets with the suppliers. They look for access to hereditary assets for an extensive variety of purposes, from fundamental examination to the improvement of new items. They are an assorted gathering, including plant gardens, industry specialists, for example, pharmaceutical, horticulture and corrective commercial enterprises, authorities and examination organizations. National Focal Points: To encourage access, clients require a reasonable and straightforward procedure that subtle elements who to contact and what the prerequisites and procedures are in supplier nations so as to get entrance. National Focal Points are in charge of giving this data. Competent National Authorities (CNAs): CNAs are bodies established by governments and

¹ *Convention on Biodiversity, Introduction to access and benefit sharing, Available at <https://www.cbd.int/abs/infokit/revised/web/all-files-en.pdf> (accessed on 30th March, 2016)*

are responsible for granting access to users of their genetic resources, and representing providers on a local or national level². National implementation measures establish how CNAs work in a given country

WHAT IS THE NAGOYA PROTOCOL?

The Nagoya Protocol on Access and Benefit-sharing is another universal settlement that expands on and underpins the usage of the CBD, specifically one of its three goals, the reasonable and fair sharing of advantages emerging from the use of hereditary assets.

The Nagoya Protocol attempted to make lawful conviction and straightforwardness for both suppliers and clients of hereditary assets by:

- Establishing more unsurprising conditions for access to hereditary assets.
- Helping to guarantee advantage sharing when hereditary assets leave the contracting party giving the hereditary assets

By guaranteeing advantage sharing, the Protocol makes motivators to preserve and reasonably utilize hereditary assets, and in this way improves the commitment of biodiversity to advancement and human prosperity.

The Nagoya Protocol is a historic point assention in the universal administration of biodiversity and is applicable for an assortment of business and non-business segments included in the utilization and trade of hereditary assets. The Nagoya Protocol depends on the basic standards of access and advantage sharing cherished in the CBD. These standards depend on potential clients of hereditary assets acquiring the earlier educated assent (PIC) of the nation in which the hereditary asset is situated before getting to the asset, and arranging and conceding to the terms and states of access and utilization of this asset through the foundation of commonly concurred terms (MAT). This understanding incorporates the sharing of advantages emerging from the utilization of the asset with the supplier as an essential for access to the hereditary asset and its utilization. Then again, nations, when going about as suppliers of hereditary assets, ought to give reasonable and non-self-assertive tenets and methods for access to their hereditary assets.

²XI Conference of Parties, Convention of Biological Diversity, Available at <https://www.cbd.int/cop/cop-11/doc/cop-11-media-press-brief-abs.pdf> (accessed on 30 March 2016)

WHAT DOES 'USING' GENETIC RESOURCES MEAN?

Using genetic resources, whether from plants, animals or micro-organisms, refers to the process of researching their beneficial properties and using them to increase scientific knowledge and understanding, or to develop commercial products.

WHY ARE GENETIC RESOURCES USEFUL?

The quick advancement of cutting edge biotechnology over the previous decades has empowered us to utilize hereditary assets in ways that have not just on a very basic level modified our comprehension of the living scene, however has likewise prompted the advancement of new items and practices that add to human prosperity, extending from fundamental solutions to strategies that enhance the security of our sustenance supplies. It has additionally enhanced preservation strategies that shield worldwide biodiversity. Hereditary assets can be put to business or non-business use:

- In business use, organizations can utilize hereditary assets to create claim to fame chemicals, upgraded qualities, or little atoms. These can be utilized as a part of harvest insurance, drug advancement, the generation of particular chemicals, or in modern handling. It is likewise conceivable to embed qualities into harvests to get attractive characteristics that can upgrade their profitability or strength to sickness.
- In non-business use, hereditary assets can be utilized to build learning or comprehension of the normal world, with exercises running from taxonomic exploration to biological system examination. This work is normally directed by scholarly and open exploration organizations. The qualifications in the middle of business and non-business use, and the performing artists included, are not generally obvious. Organizations can participate with open elements on business exploration, and now and then research with no business goals prompts a revelation that has business applications.

DIVERSE UTILIZATIONS BY SEGMENT

BUSINESS USE

Biotechnology commercial enterprises

Biotechnology commercial enterprises traverse an extensive variety of exercises including pharmaceutical, mechanical, and rural innovation. The utilization of hereditary assets in these businesses is amazingly changed.

• **Pharmaceutical industry:** Chemical compounds or substances produced by living organisms found in nature continue to play an important role in the discovery of leads for the development of drugs and contribute significantly to the bottom lines of large pharmaceutical companies. For example, the US National Cancer Institute worked with a small pharmaceutical company to develop compounds called Calanolides, derived from a tree in the Malaysian rainforest. Research demonstrated that they have the potential to treat HIV (type 1) and certain types of cancer. Clinical trials are ongoing.³

• **Industrial biotechnology:** Enzymes are used by textile, detergent, food, feed and other industries to improve the efficiency and quality of their products and production processes. Industrial biotechnology companies are particularly interested in genetic resources found in areas with high species diversity, as well as in extreme or unique environments, like salt lakes, deserts, caves, and hydrothermal vents.

• **Agricultural biotechnology:** Seed, crop protection and plant biotechnology industries rely heavily on genetic resources. Resources with traits that improve performance and farming efficiency for major crops are a key focus area for large seed companies. There is considerable growth in the value of the market for plant biotechnology-based products.⁴

Ornamental horticulture industries

There are around 100-200 plant species utilized as hereditary assets as a part of business cultivation and 500 in local agriculture. Initially, this division utilized plants from the wild, however now most of the assets are taken from sources like nurseries, herbal patio nurseries and private accumulations. In 1998, the South Africa National Botanical Institute (SANBI) and the Ball Horticultural Company made an organization which prompted the commercialization of a few South African agricultural and floricultural items.

³Guidelines for selection and management of Biological Heritage Sites, Available at <http://nbaindia.org/uploaded/ut/Final%20BHS%20guidelines%20approved%20in%20the%2019th%20Authority.pdf> (accessed on 30th March, 2016)

⁴Multilateral system of access and benefit sharing, Available at <http://www.biodiversityinternational.org/e-library/publications/detail/the-multilateral-system-of-access-and-benefit-sharing/> (accessed on 30th march 2016)

NON-BUSINESS USE

Scientific categorization

Hereditary assets are a key wellspring of data for scientific categorization, the exploration of portraying and naming species. Taxonomic exploration gives essential data to successful ecological preservation.

Preservation

Hereditary assets are the building pieces of life on earth. By building up our comprehension of them, and monitoring them, we can enhance preservation of undermined species, and the groups who rely on upon them. Kew Gardens' Millennium Seed Bank venture worked in association with agriculturists' gatherings, group drove nurseries and government organizations in more than 50 nations to gather, preserve and utilize seeds from an extensive variety of valuable and debilitated species. Viable advantage sharing implies that the nearby groups that depend on these normal assets for sustenance, solution, fuel and building materials, can keep on doing as such.

WHY IS THE NAGOYA PROTOCOL IMPORTANT? ⁵

The Nagoya Protocol will create greater legal certainty and transparency for both providers and users of genetic resources. It helps to ensure benefit sharing, in particular when genetic resources leave the country providing the genetic resources, and it establishes more predictable conditions for access to genetic resources.

By enhancing legal certainty and promoting benefit-sharing, the Nagoya Protocol encourages the advancement of research on genetic resources which could lead to new discoveries for the benefit of all. The Nagoya Protocol also creates incentives to conserve and sustainably use genetic resources, and thereby enhances the contribution of biodiversity to development and human well-being.

⁵G.S Nijar, *The Nagoya Protocol on Access and benefit sharing of genetic resources: Analysis and implementation options for developing countries*, Available at http://www.southcentre.int/wp-content/uploads/2013/08/Ev_130201_GNjar1.pdf (accessed on 30th March 2016)

WHAT ARE THE CORE ELEMENTS OF THE NAGOYA PROTOCOL?

The Nagoya Protocol sets out core obligations for its contracting Parties to take measures in relation to access to genetic resources, benefit-sharing and compliance. Access obligations Domestic-level access measures should:

- Create legal certainty, clarity and transparency
- Provide fair and non-arbitrary rules and procedures
- Establish clear rules and procedures for prior informed consent and mutually agreed terms

- Provide for issuance of a permit or its equivalent when access is granted
- Create conditions to promote and encourage research contributing to biodiversity conservation and sustainable use
- Pay due regard to cases of present or imminent emergencies that threaten human, animal or plant health
- Consider the importance of genetic resources for food and agriculture and their special role for food security

BENEFIT-SHARING OBLIGATION

Domestic-level benefit-sharing measures should provide for the fair and equitable sharing of benefits arising from the utilization of genetic resources, as well as subsequent applications and commercialization, with the contracting party providing the genetic resources. Utilization includes research and development on the genetic and/or biochemical composition of genetic resources. Sharing of benefits is subject to mutually agreed terms. Benefits may be monetary (such as royalties) or non-monetary (such as sharing research results or technology transfer)⁶.

The Nagoya Protocol also proposes the creation of a global multilateral benefit sharing mechanism in order to address benefit-sharing with respect to genetic resources occurring in trans boundary areas or situations where prior informed consent cannot be obtained. The nature of this mechanism is to be defined. Benefits from the mechanism are to be used to support the conservation and sustainable use of biodiversity globally

⁵.Robert J Lewis Lettington & Serah Mwanyiki, *Case Studies on Access and benefit sharing*, Available at <https://www.cbd.int/financial/bensharing/several-case-IPGRI.pdf> (accessed on 30th March 2016)

COMPLIANCE OBLIGATIONS

Particular commitments to bolster consistence with the local enactment or administrative necessities of the contracting party giving hereditary assets, and contractual commitments reflected in commonly concurred terms, are a critical development of the Nagoya Protocol. Gatherings to the Nagoya Protocol ought to:

- Take measures to give that hereditary assets used inside of their purview have been gotten to as per earlier educated assent, and that commonly concurred terms have been set up
- Cooperate in instances of claimed infringement of another Party's prerequisites • Encourage contractual procurements on debate determination in commonly concurred terms
- Ensure an open door is accessible to look for plan of action under their legitimate frameworks when debate emerge from commonly concurred terms
- Take measures with respect to access to equity
- Take measures to screen the use of hereditary assets designating so as to include successful checkpoints at any phase of the quality chain: research, advancement, development, pre-commercialization or commercialization.

The Nagoya Protocol likewise accommodates the advancement, overhaul and utilization of model contractual statements for commonly concurred terms, and in addition sets of principles, rules and best practices and/or guidelines for various segments.

How does the Nagoya Protocol address customary information connected with hereditary assets and hereditary assets held by indigenous and nearby groups?

The Nagoya Protocol addresses conventional information connected with hereditary assets with procurements on access, advantage sharing and consistence. It likewise addresses hereditary assets where indigenous and nearby groups have the built up right to give access to them. Gatherings to the Nagoya Protocol are to take measures to guarantee these groups' earlier educated assent, and

reasonable and impartial advantage sharing, remembering standard laws and techniques and additionally standard utilize and trade of hereditary assets.

By setting-out clear procurements on access to customary learning connected with hereditary assets, the Nagoya Protocol will help with reinforcing the capacity of indigenous and neighborhood groups to profit by the utilization of their insight, developments and practices. The Nagoya Protocol will likewise give motivations to the advancement and insurance of conventional encouraging so as to learn the improvement of group conventions, least prerequisites for commonly concurred terms and model contractual conditions identified with access and advantage offering of customary information related to hereditary assets.

WHEN WILL THE NAGOYA PROTOCOL ENTER INTO FORCE?

The Nagoya Protocol is open for signature at the United Nations Headquarters in New York from 2 February 2011 until 1 February 2012. It will enter into force 90 days after the date of deposit of the 50th instrument of ratification by a Party to the CBD

CASE STUDY TRADITIONAL KNOWLEDGE OF THE HOODIA PLANT:⁷

San tribe was the oldest community in south Africa and they had traditional knowledge of *hoodia gordonn* a succulent plant that was found in Kalahari desert, which they historically consumed to stave off hunger while their long journey specially in desert region .they were unaware that In 1996, the South African-based Council for Scientific and Industrial Research (CSIR) patented the active compounds of Hoodia, which were found to suppress appetite from the extract of this plant and they had planned to commercialize it by a pharma product without their consent or sharing of the benefits.

CSIR then gave license to pharma company “*Phytppharm*” for further research and commercial exploitation of patent for development of hoodia products .it also gave licenses later to Pharma Company *Pfizer* and *Unilever*.

⁷*Oduor Ong'wen, Biopiracy, the intellectual property regime and livelihoods in Africa Available at <http://base.d-p-h.info/fr/fiches/dph/fiche-dph-8699.html> (accessed on 30th March 2016)*

As a result of media coverage of the agreements and an intervention by a South African NGO, measures were taken to initiate negotiations between CSIR and the San peoples.

Unser article 8- state has to maintain and preserve indigenous and local community's style of living and knowledge

Conclusion which was found was a benefit-sharing agreement, which included monetary and non-monetary benefits to people of san tribes and setting up of the San Hoodia Benefit-Sharing Trust where money comes in that fund and benefit would go to entire community. The agreement called for 6 % of milestone payments during the product development period and 8% royalty income in the case of successful commercialization of a product.

Later san tribe people used Funds for the development, education and training of the San community and to support projects and institutions working to improve research and protection of the San's traditional knowledge and heritage.⁸

CONCLUSION

Get to and advantage sharing from organic assets and related customary learning are new ideas in the Himalayan locale. A few complexities have been seen for the improvement of approach and laws in the area. India is a pioneer in making and implementing the ABS law in their nation while different nations are at various phase of declaring their laws. There are other legitimate courses of action, to some degree that are controlling the entrance of organic assets which are still deficient. The most concerning issue confronted by the strategy creators and numerous Oli 117 partners is on the advantage sharing game plans, characterizing legitimate proprietors bunch who can give assent and get advantages of natural assets and TK that might get to be accessible and access system. Bonn, rules have facilitated the procedure however numerous issues are still in question. A few, lawful group rights security and related lawful instruments are developing in the area. Despite such new laws, rules, executing guidelines and regulations, and the institution of ensuing laws and tenets, to correct the constraints and weaknesses of past laws, there are still usage challenges with respect to hereditary assets, get to and advantage sharing, and conventional learning particularly with regards to IPRs. The Himalayan district, being one of the world's archives of various organic assets as far as plant and creature species and TK, has a colossal potential in the generation of prescriptions and sustenance. On the off chance that just this can be produced and used utilizing appropriate contract and checking

7. *Supra* fn.5

frameworks, generous advantages will collect to advantage national nourishment and medicinal security, while protecting biodiversity and lead to upgrades in the lives of neighborhood and indigenous people groups. The area is very sensitive to climate change, the impact of which can be extremely precarious to the local communities dependent on natural resources.⁹



8. Thomas Griebner, EvansonChegeKamau, and Others, *An explanatory guide to Nagoya Protocol on Access and Benefit sharing*, Available at https://cmsdata.iucn.org/downloads/an_explanatory_guide_to_the_nagoya_protocol.pdf(accessed on 30th march 2016)