

UNITED NATIONS INTER-AGENCY SUPPORT GROUP ON INDIGENOUS PEOPLES ISSUES**SUPPORTING THE KNOWLEDGE OF INDIGENOUS PEOPLES:****GLOBAL INITIATIVES AND RESPONSE**

INTRODUCTION

For the purpose of the present paper, traditional Knowledge (TK) or indigenous and local knowledge (ILK)¹ refers to the knowledge, innovations and practices of indigenous peoples and local communities, developed from the experience and practice acquired over the centuries and adapted to the local culture and environment, it is usually transmitted orally over generations. It tends to be collective property and may take the form of stories, songs, designs, art, proverbs, cultural values, beliefs, rituals, customary and agricultural practices, including knowledge about the breeding and conservation of plant species and animal breeds.

Indigenous peoples create, maintain and develop their traditional knowledge as part of their core identities and as a rich foundation of their well-being and own sustainable development. Traditional knowledge, innovations and practices are valuable not only to those who depend on them in their daily lives, but to modern industry, research, agriculture and animal husbandry.

Most indigenous peoples and local communities inhabit areas where the vast majority of the world's remaining biological diversity and genetic resources are found. Many of them have cultivated and used biological resources in a sustainable way for thousands of years. By doing so, they have developed a wealth of knowledge linked with the conservation and sustainable use of biological resources. Traditional knowledge has led to the development of unique species of plants and animals. Many widely used products, such as plant-based medicines, health products and cosmetics, are derived from traditional knowledge. Traditional knowledge may also provide valuable information to researchers and others regarding the specific properties and value of genetic resources and their potential use.

Additionally, there is growing awareness of the potential contribution of TK (and the collective actions of IPLCs) to the broader issues facing humanity – sustainable development and climate change.

However, research and other activities that require access to the traditional knowledge, innovations and practices of indigenous peoples and local communities have been a source of concern to these communities. Traditional knowledge is also threatened by misappropriation and misuse².

Additionally, potential users of traditional knowledge have expressed a desire for certainty and legal clarity regarding the access and use of traditional knowledge and associated genetic resources.

¹ 'In this paper, the terms traditional knowledge, indigenous knowledge and local knowledge are used interchangeably', and "traditional knowledge" includes "traditional cultural expressions"

² Sometimes referred to as unauthorized access, unlawful appropriation or illegal access or biopiracy.

Governments and international agencies have been working with indigenous peoples and local communities to better understand the nature of traditional knowledge, its relevance in addressing biodiversity loss, sustainable development and climate change.

In recent years the concept referred to as ABS (Access and Benefit Sharing) is increasingly applied to traditional knowledge. It implied that access to traditional knowledge should be based on the indigenous knowledge holders' consent, and that use, and benefit sharing be determined through mutually agreed terms. At the same time ABS processes require that indigenous peoples and local communities identify customary procedures or community protocols to inform potential users on how to proceed.

KEY MESSAGES

- Robust indigenous and local knowledge systems contribute directly to sustaining biological and cultural diversity, poverty reduction, food security, ecosystem health – including of freshwater and oceans, and is the foundation of indigenous peoples' and local communities' resilience to the impacts of climate change.
- The contribution of indigenous peoples and local communities through their traditional knowledge, to the conservation and sustainable use of biological diversity goes far beyond their role as natural resource managers. Their occupations, skills and techniques, which can also be gender-specific, provide valuable information to the global community and a useful model for biodiversity policies. Furthermore, as on-site communities with extensive knowledge of local environments, possessing an encyclopaedic knowledge of their local environment and its biodiversity, indigenous peoples and local communities are often best placed to economically and optimally manage the local ecosystem, including protected areas.
- The clues provided by traditional knowledge to identify the properties of genetic resources have allowed industries³ to develop new products and have helped scientists to better understand biodiversity. Access and benefit sharing arrangements with indigenous peoples and local communities ensure access to traditional knowledge is based on consent, and its use determined by mutually agreed terms that guarantee an equitable sharing of benefits.
- Traditional knowledge is key to achieving global sustainable development. There is an increased awareness of the links between traditional, indigenous and local knowledge and sustainable development. Since the first United Nations (UN) Conference on Environment and Development in 1992, many UN and intergovernmental bodies have explicitly recognized indigenous knowledge – including in the scientific assessments that seek to inform them. Indigenous peoples' holistic view of the environment plays an integral role in finding climate solutions today and in the future; as well as in delivering on the 2030 agenda for sustainable development's pledge to leave no one behind.⁴
- The knowledge of indigenous peoples offers valuable insights to observations of climate change. In-depth, site-specific knowledge can be coupled with broader scientific data and forecasts to provide enhanced understanding of already-occurring changes and predicted impacts upon men and women on the frontlines of climate change.
- Traditional knowledge, innovations and practices can be inadvertently threatened by actions taken to combat biodiversity loss and climate change. Conversely, when respectful relationships are built

³ Including Pharmaceutical, Energy, Biotechnical, Cosmetics and Beauty, Agricultural and Animal Husbandry.

⁴ 2030 Agenda for Sustainable Development, available at <<https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>>.

with indigenous peoples, and their knowledge systems reinforced, their sustainable management of their resources enhances national and global actions toward achieving Agenda 2030, including on food security, climate change and halting biodiversity loss.

- Indigenous knowledge systems depend on rights to customary sustainable use of natural or biological resources on the traditional territories of the relevant indigenous peoples or local communities.
- Indigenous peoples create, maintain and develop their traditional knowledge. These knowledge systems underpin the well-being of indigenous peoples and are key components of traditional occupations and livelihoods, culture and language. Safeguarding traditional knowledge, including through establishing norms, measures and capacity-building, plays a key role in indigenous peoples' sustainable development.
- Existing and emerging norms, measures and capacity-building initiatives that contribute to preserving and protecting traditional knowledge against misappropriation and misuse also play an important role in supportive policies towards indigenous peoples' development.
- Sustained support for monitoring traditional knowledge in addition to connecting on-the-ground practice, with sub-national/national/regional and international decision-making and international policy making is needed to fully realize the potential contribution of traditional knowledge.

SUMMARY

Biodiversity loss and climate change are pressing environmental challenges that nations face collectively. While there have been global gains in the recognition of traditional knowledge, more investment is needed to enhance the integration of diverse knowledge systems in formulating sustainable development policies and climate actions, including with the full and effective participation of knowledge holders. The loss of biological and cultural diversity, the erosion traditional knowledge systems and the misappropriation and misuse of the innovation and creativity inherent in traditional knowledge systems are pressing economic, and social challenges for indigenous peoples.

Since the first Rio 'Earth Summit' in 1992 the United Nations system has promoted the global recognition of traditional knowledge systems in achieving various environmental goals. This support has taken the form of intergovernmental guidance for the use of traditional knowledge, including its protection, access and benefits sharing; and promotion of traditional knowledge systems as a necessary complement to other knowledge systems, and on-the-ground support to ensuring the continued transmission and vitality of indigenous knowledge systems.

The following paper provides updates towards the international recognition, respect, preservation and protection of traditional knowledge and policy-relevant areas for discussion.

BACKGROUND and ANALYSIS

Traditional knowledge and achieving the Sustainable Development Goals

The contributions of indigenous and local knowledge systems have been documented in the scientific and gray literature in many domains: biodiversity conservation and wildlife management, customary marine resource management, rural development and agroforestry, traditional medicine and health, impact assessment; and natural disaster preparedness and response.⁵ Traditional knowledge issues cut across

⁵ IPBES (Intergovernmental Platform on Biodiversity and Ecosystem Services). 2013. Initial elements of an IPBES approach: Towards principles and procedures for working with Indigenous and Local Knowledge (ILK) systems. IPBES/2/INF/1/Add.1

many domains in relation to global environmental issues, from biodiversity conservation and natural resource management, to use of genetic resources and to climate change observations, mitigation and adaptation. Work on indigenous knowledge provides support to understanding the role of customary livelihoods within sustainable development and the links between environmental management, science and well-being.

There is also a growing appreciation of the value of traditional knowledge to modern industry and agriculture. Many widely used products, such as plant-based medicines, health products and cosmetics, have been developed using indigenous traditional knowledge.

As such, recognition of the links between traditional knowledge, traditional occupations, sustainable customary use of biological resources as well as its wider potential benefits has led to international work on traditional knowledge in many areas including to ensure its recognition, continued vitality and protection from misappropriation.

The Convention on Biological Diversity provides the clearest recognition of the links between traditional knowledge and biodiversity conservation through work on the following cluster of Articles that are of specific relevance to indigenous peoples. Articles (8(j), 10(c)), 17.2 and 18.4) include obligations on Parties to the Convention to: respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities; protect and encourage customary sustainable use of biological diversity; facilitate the exchange of information, from all publicly available sources, relevant to the conservation and sustainable use of biological diversity, as well specialized knowledge, indigenous and traditional knowledge and where feasible, include repatriation of information., as well as encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention.⁶

Additionally, Aichi Biodiversity Target 18 of the CBD's Strategic Plan for Biological Diversity (2011-2020) provides that:

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

The Convention on Biological Diversity is implemented by Parties (member Governments who have ratified the Convention) at the national level. A general national focal point for the Convention, as well as specialist focal points, including a focal point for traditional knowledge, is appointed by the government and usually housed within departments of environment.

In order to assist Parties in implementing their obligations under the Convention, the Governing Body (CBD COP) adopts by consensus principles and guidelines for implementation at the national level. Parties to the Convention are requested to report on the implementation of such guidance, through the national reports and directly to the Subsidiary Body for Review of Implementation and the Working Group on Article 8(j) and related provisions on a regular basis.

⁶ Article 8 (j) is closely linked with other articles of the Convention, in particular Articles 10 (c), 17.2 and 18.4.

There is an extensive set of guidelines and principles adopted under the Convention on Biological Diversity that address traditional knowledge and customary sustainable use of biodiversity. They include: a composite report on the status and trends of traditional knowledge⁷, environmental impact assessment guidelines that ensure cultural and social impact are included⁸, and a Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities⁹. The Convention has also adopted a global Plan of Action on the Customary Sustainable Use of Biological Diversity;¹⁰ and guidelines for the development of national arrangements for traditional knowledge that requiring consent of indigenous peoples and local communities¹¹ for accessing their knowledge.¹²

The Convention has also adopted Guidelines for the Repatriation of Traditional Knowledge; a Glossary of Key Terms and Concepts within the context of Article 8(j) and related provisions;¹³ Methodological Guidance Concerning the Contributions of Indigenous Peoples and Local Communities;¹⁴ and a Checklist of Safeguards in Biodiversity Financing Mechanisms under the Convention on Biological Diversity.^{15 16}

Many of these guidelines embody and promote important global principles including that traditional knowledge is accessed with the free prior informed consent of the original knowledge holders and its use is based on mutually agreed terms guaranteeing an equitable sharing on benefits. Overall, the guidance and principles adopted under the Convention highlights the need for the effective participation of indigenous peoples in all matters of direct relevance to them.

Additionally, these policy tools, if effectively implemented at the national level, will assist in achieving Aichi Biodiversity Target 18 of the CBD's Strategic Plan for Biological Diversity (2011-2020), which provides that:

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the

⁷ UNEP/CBD/WG8J/5/3 Phase Two of the Composite Report on the Status and Trends Regarding the Knowledge, Innovations and Practices of Indigenous and Local Communities Relevant to the Conservation and Sustainable Use of Biological Diversity, available at: <https://www.cbd.int/doc/?meeting=WG8J-05>

⁸ Decision VII/16

⁹ Decision X/42

¹⁰ Decision XII/12 B, annex

¹¹ The use and interpretation of the term "indigenous peoples and local communities" in these Guidelines should refer to decision XII/12 F, paragraphs 2 (a), (b) and (c)

¹² Decision XIII/18. The adoption of the Mo'otz kuxtal voluntary guidelines has also advanced the work being pursued by the Working Group on *sui generis* systems for the protection of traditional knowledge, innovations and practices of indigenous peoples and local communities by highlighting the potential role of community protocols and procedures for access to traditional knowledge

¹³ Adopted at COP 14

¹⁴ Adopted at COP 14

¹⁵ Adopted at COP 14

¹⁶ The full versions of all these guidelines and principles in the six United Nations' languages can be found at: <https://www.cbd.int/guidelines/>

Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

As such these guidelines and principles are substantial contributions to protecting traditional knowledge as envisaged under Article 31 of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), which is:

Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.

Additionally, the Convention's Nagoya Protocol¹⁷ is a legally binding protocol that establishes that access to traditional knowledge associated with genetic resources is based on prior informed consent or approval and involvement. Additionally, the Nagoya Protocol, in article 6, requires that Parties take measures with the aim of ensuring that prior informed consent or approval and involvement of indigenous and local communities is obtained for access to genetic resources where they have the established right to do so. Of particular note, the COP/MOP NP (Governing body to the Nagoya Protocol), at its first meeting, agreed, amongst other things, to include two indigenous representatives of the compliance committee to the Nagoya Protocol.

Climate change

Indigenous peoples, including those in small island, high-altitude, desert and Arctic environments, are particularly vulnerable to the adverse impact of climate change. Already in some parts of the world, such as the Pacific, some have become climate refugees.

Despite this high exposure to the impacts of climate change,

Indigenous knowledge systems provides a crucial foundation for understanding local-level adaptation priorities and the range of appropriate adaptation options to enhance resilience and food security of indigenous women and men. Indigenous peoples' holistic view of the environment and community provide valuable input into understanding the diversity of low carbon development strategies being used and how these could be promoted.

Traditional knowledge could provide an integral component to ensure the success of carbon mitigation projects such as fire management for carbon abatement and local monitoring and forest knowledge could contribute to national carbon mitigation programmes such as REDD+.

¹⁷ The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity: <https://www.cbd.int/abs/>

Critically, the living space, biodiversity conservation, land and forest management, traditional knowledge, livelihood strategies, occupations and ways of life of indigenous peoples generate synergies between measures aimed at climate mitigation and adaptation¹⁸.

At the UNFCCC, local communities and indigenous peoples are recognized as an integral part of finding climate solutions today and in the future. As part of this recognition, the Conference of Parties at its twenty-first session (COP 21) established the Local Communities and Indigenous Peoples Platform to enhance the engagement of local communities and indigenous peoples in international climate policy processes that affect their lives. In November 2017, Parties and local communities and indigenous peoples representatives reached a milestone, with the agreement on the overall purposes and functions of the Platform, the first of which relates to knowledge.¹⁹ The platform will promote the exchange of experience and best practices with a view to applying, strengthening, protecting and preserving traditional knowledge, knowledge of indigenous peoples and local knowledge systems, as well as technologies, practices and efforts of local communities and indigenous peoples related to addressing and responding to climate change, taking into account the free, prior and informed consent of the holders of such knowledge, innovations and practices. Recently, Parties agreed to establish a Facilitative Working Group to further operationalize the Platform and facilitate the implementation of its functions.

In addition to the Platform, under the UNFCCC, the Nairobi Work Programme serves as the knowledge-to-action hub facilitating the development, dissemination and application of knowledge including traditional knowledge.²⁰

Knowledge transmission and education

In 2016, the UNESCO Global Education Monitoring (GEM) Report, found that

Education systems should not encourage unsustainable lifestyles and can learn much from indigenous communities: They should respect local cultures and plural knowledge systems, and provide instruction in local languages.²¹

While recognizing the role of formal schooling systems in the loss of significant knowledge of nature, culture and values, the report also highlights means through which education can foster dialogue and create partnerships to promote indigenous knowledge and its integration in various initiatives. These include recognizing the important role of elders as traditional custodians of knowledge and the most valuable source of transmission, and the use of local language as the language of instruction in schools.

Formal and non-formal education institutions can be spaces for the continued transmission of intangible cultural heritage, including traditional knowledge, practices and cultural expressions of indigenous peoples. The UNESCO 2003 Convention for the Safeguarding of the Intangible Cultural Heritage recognizes this and includes a reference to ‘transmission, particularly through formal and non-formal education’, as part of the proposed safeguarding measures (Article 2.3).

¹⁸ ILO 2017 Indigenous peoples and climate change From victims to change agents through decent work http://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_551189.pdf

¹⁹ See: unfccc.int/10475

²⁰ See: unfccc.int/node/690

²¹ See: UNESCO. Global education monitoring report 2016: education for people and planet: creating sustainable futures for all. <https://unesdoc.unesco.org/ark:/48223/pf0000245752>

Promoting and protecting traditional knowledge

It is widely recognized that traditional knowledge forms part of the communities' identities and constitutes an essential vector of their own development. It should not be treated therefore as a mere commodity (however economically valuable traditional knowledge might be for communities and/or third parties) that would be free to use under any circumstances. Indigenous peoples have a legitimate sense of ownership of, and essential value inherent in, their own traditional knowledge. Access to, and use of traditional knowledge, should therefore be submitted to appropriate norms, mechanisms and practical measures, in support of their sustainable development and in the prevention of misappropriation and misuse.

Article 31 of the UNDRIP, mentioned hereabove, is a relevant key reference in this regard.

Another key international instrument regarding the rights of indigenous peoples, the ILO Indigenous and Tribal Peoples Convention, 1989 (No. 169), also promotes indigenous peoples' knowledge and occupations, and provides vital guidance for achieving sustainable development.²²

In accordance with its mandate, the World Intellectual Property Organization (WIPO), the specialized agency of the United Nations addressing intellectual property issues, is committed to shaping a balanced and effective international intellectual property system for the benefit of all, including indigenous peoples. WIPO's work in this regard rests on two mutually-reinforcing pillars, both directly in furtherance of Article 31 of UNDRIP.

First, WIPO, in partnership with indigenous peoples, delivers an awareness-raising and capacity-building program that further enhances indigenous peoples' practical knowledge of the threats posed by misappropriation and misuse, and enables indigenous peoples to better understand the nature and scope of intellectual property-related tools (such as copyright, trademarks, geographical indications and patents) that they may use, if they wish, to protect their traditional knowledge and, to define their strategies as they best consider in line with their own objectives and their own developmental aspirations. WIPO's support includes workshops, distance learning courses (free of charge for indigenous peoples), scholarships, an Indigenous Fellowship and training activities, as well as the dissemination of publications. The WIPO Traditional Knowledge Toolkit (*Documenting Traditional Knowledge – A Toolkit*) that was launched in 2018²³ and *Protect and Promote your Culture: A Practical Guide to Intellectual Property for Indigenous Peoples and Local Communities*²⁴ have been designed in support of indigenous' specific interests and in consultation with them.

The WIPO Indigenous Fellowship Program in particular enables members of indigenous and local communities to work in WIPO's Traditional Knowledge Division on issues relevant to indigenous peoples²⁵ (see <https://www.wipo.int/tk/en/indigenous/fellowship/> for more information). The Program was launched in 2009.

²² See ILO Indigenous and Tribal Peoples Convention, 1989 (No. 169), available at: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

²³ See <https://www.wipo.int/publications/en/details.jsp?id=4235>

²⁴ See <https://www.wipo.int/publications/en/details.jsp?id=4195>

²⁵ See <https://www.wipo.int/tk/en/indigenous/fellowship/>

Another WIPO resource of interest for indigenous peoples is the new animation launched this year – *The Adventures of the Yakuanai Navigating Traditional Knowledge and Intellectual Property*: It features a fictional indigenous community that explores the complex issues and opportunities that arise when its TK interacts with the intellectual property system²⁶. It is currently being made available also in indigenous languages.

Second, in parallel, in 2010 the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore initiated formal negotiations towards one or more international legal instruments that would ensure the effective protection of genetic resources, traditional knowledge and traditional cultural expressions. The Committee's normative work has intensified. Draft articles in both negotiating texts on the protection of traditional knowledge and traditional cultural expressions, as work-in-progress, make explicit references to the UNDRIP and clearly identify indigenous peoples as beneficiaries.

The WIPO Secretariat, with WIPO Member States' express support, has taken robust measures ensuring and enhancing the full and effective participation of indigenous peoples' representatives as observers in the WIPO Intergovernmental Committee's negotiations. For example, indigenous representatives are the only non-governmental delegates who participate directly in the negotiations' informal expert meetings and contact groups.

CONCLUSION

There is broader recognition of the links between traditional knowledge and sustainable development, particularly under the Second Decade of the World's Indigenous people. Traditional, indigenous and local knowledge has emerged as an essential resource, alongside other knowledge systems, to inform environmental decision-making in global intergovernmental processes. Traditional knowledge is also a key component of indigenous peoples' identity and potential for development that warrants protection.

This recognition is reflected in the continued discussions or negotiations and establishment of international conventions, protocols, guidelines and other norms and practices towards the protection and inclusion of traditional knowledge in environmental policy and related scientific assessments, as well as other development-oriented policies, including through capacity-building activities. Good practices established through these discussions could be considered to further improve the engagement of indigenous peoples in these processes.

Existing and emerging appropriate norms, mechanisms, practical measures and tools should come in support of the transmission, monitoring, promotion and protection of traditional knowledge, including those traditional occupations and livelihoods that embody traditional knowledge as well as contribute to community resilience and sustainable development of indigenous peoples in a manner that leaves no one behind.

²⁶ See <https://www.wipo.int/tk/en/>