(DRAFT - FOR THE EXPERT MECHANISM IN THE RIGHTS OF INDIGENOUS PEOPLES REPORT ON SELF-DETERMINATION UNDER THE UN DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES)

The Braiding of the Rights to Self-Determination and the Free, Prior, and Informed Consent Mechanisms across UNDRIP, SDGs and CBD Policy Platforms

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This review starts highlighting the importance of the contemporary legislative history between Indigenous Peoples and nation-states around United Nations conventions, producing cutting-edge mandates of various kinds of issues concerning the rights of Indigenous Peoples in the last three decades. In 2007, the UNPFII adopted the Universal Declaration on the Rights of Indigenous Peoples (UNDRIP) in response to active pressure from global Indigenous networks and organizations during the "First International Decade of the World Indigenous Peoples" in 1994, proclaiming a historic body of collective rights and human rights of Indigenous Peoples and individuals, while setting the stage for the continuous development of international standards and national legislation to protect and promote Indigenous Peoples' human rights.

In 1995, the General Assembly identified a number of specific objectives, including the development of activities by specialized agencies of the UN system and other inter- governmental and national agencies that benefit Indigenous Peoples. These activities included the implementation of educational interventions for Indigenous and non-Indigenous societies with regard to the cultures, languages, rights and aspirations of Indigenous Peoples, which led to a more specific language on the promotion and protection of the rights of Indigenous Peoples. A second period called the "Second International Decade" in 2005, included a broad range of issues, such as collective and individual rights, self-determination, globalization, colonization, and a process of education in the General Assembly, seeking improvements "to strengthen international co-operation to solve the problems faced by indigenous people in such areas as human rights, the environment, development, education and health." Particularly, the UNPFII identified the principles of self-determination and the right to be consulted in all issues that might affect them as strategic elements in their recognition and protection and key

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¹ Agenda 21 "UN Documents Cooperation Circles" - Earth Summit 1992

solutions to endemic global poverty and marginalization of Indigenous Peoples across the world, and vital steps towards culturally appropriate forms of sustainable development.

The principle of self-determination has multiple applications in all social and economic human activities as an inherent right of a local community to govern in their best interest and decision- making authority. In the specific context of Indigenous Peoples, it implies a historical and political weight in the relation with the nation-state's local institutions, as the legal history between a particular Indigenous Peoples and a nation-state constitution. Education, legal, cultural, scientific, health, environmental, and political self-determination, are part of a larger vision from world Indigenous Peoples to restore their forms of governance. The notion of autonomy in a complementary perspective is a dynamic in-movement social project that updates and recreates itself in individual basis and under different national legislations. It also refers to a voice and decision-making authority in local and community governances' structure with no internal government institutions and non-recognition of different governance than the local and regional centralized dependent national governance.

The notion of self-determined development requires also the position towards the protection of peoples' sociocultural expressions, value systems, and traditions (Kalafatic, 2019). Thinking along these lines, the new set of Biocultural Indicators of Indigenous Peoples' food and agroecological systems (Hendriks, 2019), are defined by their right of access to and use of traditional lands and territories, their change in consumption and preparation of traditional foods and medicines and their associated ceremonial uses, and by the use of languages associated with traditional food systems. In the other hand, the notion of Free, Prior, and Informed Consent (FPIC) refers to the regulated equal exchange among Indigenous Peoples governance, knowledge systems, cultural and genetic resources and nation states governance and societal institutions, required as derived from the recognition and exercise of self-determination to the surviving nations and communities impacted by vast life and material losses due to colonization that are impossible to accurately estimate today. The exercise of selfdetermination relies on the precise capacity of Indigenous Peoples to exercise their governance systems within their own cultural, legislative and political vision according to and in respect of their national legislations.

IPLCs governance systems must be strengthened in order for FPIC to be a fair and legal mechanism that ensures productive interactions and integrations around critical issues such as loss of biodiversity, climate change, and environmental disaster mitigation. This is particularly critical when Indigenous communities are often forced to participate in FPIC mechanisms that are initiated and managed by extractive corporations, rather than the communities themselves. Recent academic research around natural resources, extraction and indigenous rights in Latin America and the boundaries of environmental and State-corporate crime in Bolivia, Peru, and Mexico (Wong, 2018) shows that most cases of corporate-controlled FPIC processes result in the approval of extractive operations that contradict the historical stances of Indigenous nations reduced to commercial campesino cooperative identities presenting an increase

in environmental policy violations and potentially irreversible environmental and social damages in many protected areas. As a result, there is a collective distrust over state and company-led prior consultations. It would be naive to believe that through procedures that been historically manipulated, Indigenous Peoples can overcome centuries of injustice, inequality and violence. Therefore, one important consideration is that the equitable participation of Indigenous Peoples in FPIC mechanisms needs to be preceded by effective redistributions of economic resources towards indigenous territories not conditioned to surrendering or alienating their land rights. Historically, the participatory processes used by settler-colonial institutions in interaction with Indigenous Peoples have been designed with the interests of those institutions in mind. In many processes, the FPIC mechanism has typically not been observed beyond designated listening sessions, and not fully understood as they imply layers and stages for educational processes that formally ensure equitable consultation stages based on prior collective review of diverse cultural, social, environmental, ecological, economic, political and governance considerations, among others. These processes need to be monitored in respect of Indigenous cultural and social protocols and timelines as well.

Because of the fragmentations imposed by distinct fields of inquiry and knowledge specializations, decolonization of global sustainable development strategies requires also breaking the silos – interdisciplinary, policy-based and holistic/epistemic - with regard to working with Indigenous Peoples. For instance, the topic of land rights needs to be reviewed and revisited, in terms of treaty-binding agreements that institutions and societies have entered into with the survivors of colonization. Such rights are understood to comprise a people's universal legitimate right to territorial spaces and a respect for their integrity, to live self-determined existence as Peoples. Therefore, policy decolonization needs to address such issues, perceptions, and claims thereof, promoting their discussion among *all participants* in global development and policy making settings. Several powerful examples, are community education interventions within Indigenous communities in different parts of the world focused on learning about developing policy language in regard to self-determination and territory, including FPIC and local law and policy frameworks consistent with UNDRIP.

In science and environmental research, the attention to the role of Indigenous Peoples in biodiversity conservation has also included new questions about their capacity for natural resource management governance, the status of genetic materials under their care and management, and the relationships between genetic science, human rights, and governance of world Indigenous communities. As more stakeholders are convinced that sustainable development requires productive interactions between Indigenous Knowledge Systems and western science, the understanding of the similarities and differences between IKS and WSK as well as the benefits and challenges of integrating these different knowledge systems, would be a prerequisite to knowledge integration.

However, in order to establish the significance of the implications of equitable relations between Indigenous Knowledge and Traditional Knowledge (IK/TK) and western science it is of vital importance to focus on the economic dimensions of self-

determination, often presented exclusively as cases of breaching of cultural and ethical protocols and equitable relation or partnership. Wright (2020) presents evidence of a larger case of global economic benefits of medicinal plants with associated IK/TK affecting Indigenous Peoples human and land rights and resources, as well as economic development rights for centuries:

"While Indigenous and local communities do not view traditional knowledge solely as a commodity to be traded, traditional knowledge is also of significant economic value. Approximately 80 per cent of the world's population relies on traditional medicine for their primary health care needs. Furthermore, where plants are used in prescription medicines, it is estimated that approximately 75 per cent of those plants were originally used in traditional medicine. Traditional medicine may, therefore, represent a significant resource for companies engaged in pharmaceutical or agricultural research and development and may be used to drive cost savings. The value of the world market for medicinal products derived from leads associated with traditional knowledge is estimated at approximately USD 43 billion. It is further estimated that benefits of approximately USD 5.4 billion would flow to Indigenous and local communities around the world if multinational corporations paid royalties for traditional knowledge used in food, agriculture and pharmaceuticals.

As these unequal economic relations funded by colonization, displacement, exclusion and many forms of violence become untenable and unsustainable, the distance among diverging emerging economic and social trends and gaps in the global north and south is growing. FPIC as a global mechanism emerge as the ultimate critical tool for governing interactions between Indigenous Peoples, nation-states and key non-state actors who are critical stakeholders in the global SDGs.

³ Statement by the International Indigenous Forum on Biodiversity cited on Conference of the Parties to the Convention on Biological Diversity, *Report of the Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/7/21 (13 April 2004) [585]-[588].

⁴ Katrina Brown, 'Medicinal Plants, indigenous medicine and conservation of biodiversity in Ghana' in Timothy M. Swanson (ed), Intellectual Property Rights and Biodiversity Conservation: An Interdisciplinary Analysis of the Values of Medicinal Plants (Cambridge University Press, 19950 201.

⁵ Jack Kloppenburg Jr, No Hunting! Biodiversity, Indigenous Rights and Poaching (1991) 15(3) Cultural Survival Quarterly 14.

⁶ Shiva, V. (2016) Biopiracy: The plunder of nature and knowledge. North Atlantic Books. P. 11-16

⁷ Posey, D. A., & Plenderleith, K. (2002). Commodification of the sacred through intellectual property rights. *Journal of Ethnopharmacology*, *83*

⁸ United Nations Development Program and Rural Advancement Foundation International, Conserving Indigenous Knowledge: Integrating two systems of innovation (Rural Advancement Foundation International, 1994) 17.

FPIC requires the establishment of sequenced consultation processes with an Indigenous Population prior to development, research and extractive projects or the use of resources within Indigenous Peoples' territory. The principles for respectful and effective engagement with Indigenous Peoples around the Sustainable Development Goals must involve understanding and addressing the unequal power relations between different social and economic systems and cultural standards that guide decision-making processes. These principles ultimately require the enforcement of the international Free, Prior and Informed Consent (FPIC) standards to ensure that the principle of "meaningful consultation is respected," as established by ILO 169 and UNDRIP.

For this to lead to the explicit and un-coerced consent of Indigenous Peoples, it requires also the thorough review of culturally appropriate information, well in advance of any legislative/administrative decisions, projects, or other measures likely to affect their lands, territories, resources, and/or livelihoods. The right of self-determination underlies how policy decision-making should incorporate the participation of IPs' traditional/customary authorities based on local cultural protocols. This emphasizes the value of FPIC as a pragmatic principle that presents the necessary conditions for sustainability as well as conflict resolution mechanisms in any engagement with Indigenous Peoples.

Managing these frameworks requires also the development of "cross-boundary capacities" to oversee the complex knowledge integrations and applications that follow up with international law and policy mandates and recommendations. It was through these processes, for instance, that FPIC as a boundary policy became applicable to multiple fields, adopted by the International Fund for Agricultural Development's policy with Indigenous Peoples, ratified by UN-FAO formal guidelines for all field operations, the Convention on Biological Diversity— Akwé: Kon Guidelines, as well as by the UN Development Group Guidelines for country-level planning and programming (Kalafatic, 2019).

The development of functioning FPIC processes indeed requires cross-boundary capacity from nation-states, organizations, and institutions dealing with topics such as policy analysis, data management, cultural protocols, communication styles, research expertise, and collaboration platforms, among others, to engage with Indigenous Peoples from an informed capacity. Under the umbrella of FPIC, such protocols are specific to each community implementation process, both derived from and in support of their governance systems and rights (Kalafatic, 2019). The understanding of FPIC goals and processes is a productive stage toward understanding the issues within the international legal and policy regimes that govern sustainable development which, in turn, define and constrain the exchange of land tenure practices and resources of Indigenous Peoples.

Both self-determination as principle and FPIC as functioning mechanism are tied to the relevance of Indigenous Peoples and Local Communities' *governance* as the appropriate counterpart for consented interactions between research and policy

development towards the SDGs. These two frameworks are also intersected in the complementary frameworks of food security and food sovereignty in light of Indigenous Peoples' *territorial and land rights*, as well as the affirmation of Indigenous Peoples' decision-making and research capacity in sustainable development.

Finally, the right of self-determination extends to different fields as biodiversity conservation and education, as well as to the necessary methodological integrations of diverse knowledge systems to serve the different areas of action under UNDRIP and the SDGs. One area in which self-determination is key to the affirmation to the rights of Indigenous Peoples in the Convention of Biological Diversity and in regard to biodiversity conservation, are the collective design of Biocultural indicators that contain six emergent criteria that reflect core components of Indigenous environmental management (EM) that also mobilized western science paradigms from a selfdetermined approach. These are: Cultural Saliency (social or cultural practices; Supportive of place-based relationships (around self-determination); Inclusive (connected to other species, services, values or relationships); Sensitive to Impacts (on ecological processes); Perceptible (through quantitative or qualitative approaches); and Linked to Human Well-being (food security, cultural identity, economic activity) (Deroy et al., 2019). The shift by western educational systems to incorporate Indigenous Peoples rights to self-determination, as ratified by international law and policy, requires the engagement of interdisciplinary perspectives. This interdisciplinarity challenging the classical methodological and theoretical fragmentation of Indigeneity as individual disconnected units of study into an interconnected global epistemic and material reality. This repositioning defines actions towards the assertion of Indigenous governance as part of the process of advancing forms of political self-determination.

The relevance of self-determination is also connected to biological and environmental science research conducted by research universities, organizations, and corporations, as an important field of interaction that almost inevitably involves the strategic issues of intellectual property and bioethics around sensitive biological and genetic data, as well as in the capacity of Indigenous Peoples to implement or monitor prior and informed consent protocols for the access and benefit-sharing of the use of genetic resources (ABS) with associated IK/TK. The creation of a certified capacity for authentic implementations of Free, Prior, and Informed Consent processes from multiple levels of social and political organizations around the exercise of selfdetermination are vital. Existing frameworks around global sustainable development and science research too often circumvent the principles of self-determination and prior consent when possible. The recognition of self-determination recognizes the centrality of governance as the reaffirmation of Indigenous Peoples' inherent territorial, cultural, and economic rights, and therefore key to their informed and consented participation as strategic partners in the fulfillment of the global sustainable development goals post-2020.

Implications for Self-Determination and FPIC in the Convention of Biological Diversity and SDGs

A critical front of action and development around the right to self-determination and FPIC as universal mechanisms for Indigenous Peoples, is biodiversity conservation under the Convention of Biological Diversity, backed by a treaty legal binding agreement that establishes specific goals for nations-states and institutions to comply with in observance to the rights of Indigenous Peoples. In this platform, both self-determination and prior consent constitute inextricable paradigms referring to Indigenous collective rights.

According to the Global Biodiversity Outlooks (GBO) assessment version 5⁹, a flagship publication of the Convention on Biological Diversity (CBD) recently released in 2020, the contributions of indigenous peoples and local communities have been too often neglected and marginalized, and there is a systemic failure to recognize and support these contributions is directly tied to our global failure to meet the majority of them. The GBO report cites the pending completion of several **Aichi Targets**¹⁰ that are part of the parties binding agreements with the CBD:

Aichi Target 14 - The capacity of ecosystems to provide the essential services on which societies depend, continues to decline, and consequently, most ecosystem services (nature's contributions to people) are in decline. *The target has not been achieved*

Aichi Target 15 - Progress towards the target of restoring 15 per cent of degraded ecosystems by 2020 is very limited. Nevertheless, ambitious restoration programs are under way or proposed in many regions, with the potential to deliver significant gains in ecosystem resilience and preservation of carbon stocks. *The target has not been achieved*

Target 16 – implementation of the Nagoya Protocol and ABS mechanisms has been partially achieved. Digital Sequence Information represents a major challenge to the Nagoya Protocol.

Target 18 - There has been an increase in the recognition of the value of traditional knowledge and customary sustainable use, both in global policy fora

⁹ Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5 – Summary for Policy Makers. Montréal.

¹⁰ Aichi Targets - Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use; Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity; Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services; Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building. Convention of Biological Diversity (https://www.cbd.int/sp/targets/)

and in the scientific community. However, despite progress in some countries, there is limited information indicating that traditional knowledge and customary sustainable use have been widely respected and/or reflected in national legislation related to the implementation of the Convention, or on the extent to which indigenous peoples and local communities are effectively participating in associated processes. *The target has not been achieved*

Target 19 – More action is needed on science-based technologies and knowledge integration processes that involve Indigenous Knowledge /Traditional Knowledge Systems.

Target 20 - The increases in domestic resources for biodiversity in some countries, have been partially achieved.

According to the latest ILO169¹¹ world report of 2019, The Global Summary of Progress Towards the Aichi Biodiversity Targets¹² and the IPBES Global Assessment on Biodiversity and Ecosystem Services¹³, there is a critical need to focus on these areas of action which require the affirmation of self-determination and the systematic capacity from Indigenous Peoples to be in charge of develop and manage mechanisms for free-prior and informed consent:

Protected Areas Conservation – Agroecology and the development of green jobs around protected areas in order to reduce pressure on wildlife resources.

Training and Mentoring Neighboring Communities - Green entrepreneurship through beekeeping, mycoculture and heliciculture.

Other references related to the strategic role of Indigenous Peoples are contained also on the "Leader's Pledge for Nature *United to Reverse Biodiversity Loss by 2030 for Sustainable Development*¹⁴, developed by the Alliance of Small Island States (AOSIS), Belize, Bhutan, Colombia, Costa Rica, the EU, Finland, Kenya, Seychelles,

¹¹ Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an inclusive, sustainable and just future Copyright © International Labour Organization 2019

PROGRESS TOWARDS THE AICHI BIODIVERSITY TARGETS: AN ASSESSMENT OF BIODIVERSITY TRENDS, POLICY SCENARIOS AND KEY ACTIONS Global Biodiversity Outlook 4 (GBO-4) Technical Report. Copyright © 2014, Secretariat of the Convention on Biological Diversity

¹³ IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. XXX pages.

¹⁴ Leaders' Pledge for Nature. Political leaders participating in the United Nations Summit on Biodiversity in September 2020, representing 84 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030

and UK, with intergovernmental and non-governmental partner organizations, launched during the "Leaders Event for Nature and People" on 28 September, in support of the first UN Summit on Biodiversity on 30 September. This platform calls for the recognition of stewardship, emphasizing community dialogue along with the role of natural biodiversity in underpinning sustainable development & natural resource management through approaches like Integrated Water Resources Management, Water-Energy-Food nexus, Ecosystem-based Adaptation, among others, working with indigenous & local communities to improve livelihoods, strengthen entrepreneurship culture, foster community resilience, mainstreaming the SDGs agenda of biodiversity action in various capacities. However, the relations to Indigenous Peoples governance systems as strategic non-state stakeholders, and the incorporation of the diversity Indigenous Knowledge Systems (TK, TK, IEK and others) in equitable interactions and integrations with western science, are not clear and require their discussion as part of FPIC implementations.

This involves changes in the new global framework for international cooperation to attain the CBD's 2050 vision for "Living in Harmony with Nature post-2020" regarding the role of Indigenous Peoples and Local Communities (IPLCs) in realizing the global biodiversity pledges made on 30th Sept 2020 at UN General Assembly by the Heads of State. There is a need to further strengthening the integration of the role of indigenous peoples and local communities and the level of stakeholder engagement. At the same time, it is important to connect UNDRIP to biodiversity conservation and plant genetic resources conservation and use for food and agriculture, as well as relevant areas to design, carry out, consult and lobby master plans, programmers, projects as well as goals, actions, evaluation and relevant indicators in plant genetic resources conservation, and use for social/environmental and economic goals in the best interest of Indigenous Peoples.

Conclusions

It is vital to understand and promote IPLCs self-determined governance systems through the application of FPIC as mechanisms to ensure IPLCs are equal partners in research, decision-making and implementation of guidelines and goals included in the organic relation between nation-states and Indigenous Peoples. Cooperation, partnerships and collaboration frameworks should be designed in ways in which it strengthens Indigenous Peoples governance systems and capacities to promote that Indigenous Peoples global collective rights are recognized by all national legislations, and to allow them to participate as legitimate partners in the fulfillment of the global SDGS.

Full implementation of UNDRIP is essential for effective integrations of Indigenous Peoples, their knowledge systems, and their resources as strategic partners to achieve

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¹⁵ The Science-Policy Dialogue titled "Towards living in harmony with nature by 2050" was a dialogue between science, policy and civil society to discuss the role of science and policy in identifying the transitions needed, and to inform the post-2020 global biodiversity framework.

the global sustainable development goals (SDGs). In this regard, effective and equitable interactions between diverse Indigenous Knowledge Systems (TK, TEK, IEK, etc.) with science are inherently related to land-based political rights and self-determination laws that determine the scope of relationships between Indigenous Peoples, nation-states and global corporate development projects. Protocols for informed and consented engagement need to be constantly and explicitly updated with the direct participation of Indigenous Peoples via mechanisms consistent with international law. These consent processes must be seen as the integration of Indigenous Peoples and Local Communities, as well as their knowledge systems and genetic resources, as strategic actors and contributors of sustainable solutions to critical global issues across the world. In all cases, the incorporation of prior consent mechanisms towards a full FPIC process implementation would determine accountability frameworks and commitments for every project that might affect the rights and resources of Indigenous Peoples.

The process of decolonizing equitable implementations of the SDGs can be effectively guaranteed by the implementation of FPIC mechanisms. The defense of critical mandates and subsequent associated legal binding agreements depends on the defense of FPIC as an UNDRIP-mandated and universal mechanism. In this regard, the support of diverse global Indigenous academic and legal representations is vital for the defense of a bundle of rights that IPLCs have secured in international law and successfully introduced in national legislations with multiple benefits for nation-states.

A parallel development of a global Indigenous Peoples commons around education, commerce, and economic development needs to continue with the consolidation of intellectual proprietary rights over Indigenous knowledge funds as they are applicable to multiple disciplines. The exercise of territorial and land rights directly contributes to global decolonization efforts around the world. Local Indigenous societies must continue joining international law and policy bodies to counter corporate hegemonic control over strategic resources. It is vital for the survival of Indigenous Peoples to continue negotiating their right to self-determination through FPIC mechanisms, collectively promoting productive constitutional reforms within their own legislative contexts in order to regain their political identities as First Nations with all the power and securities that entails to participate as legitimate contributors to the global SDGs.

Notes

- ³ Statement by the International Indigenous Forum on Biodiversity cited on Conference of the Parties to the Convention on Biological Diversity, *Report of the Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity*, UN Doc UNEP/CBD/COP/7/21 (13 April 2004) [585]-[588].

 ⁴ Katrina Brown, 'Medicinal Plants, indigenous medicine and conservation of biodiversity in Ghana' in Timothy M. Swanson (ed), Intellectual Property Rights and Biodiversity Conservation: An Interdisciplinary Analysis of the Values of Medicinal Plants (Cambridge University Press, 19950 201.
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- ⁸ United Nations Development Program and Rural Advancement Foundation International, Conserving Indigenous Knowledge: Integrating two systems of innovation (Rural Advancement Foundation International, 1994) 17.
- ⁹ Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5 Summary for Policy Makers. Montréal.
- ¹⁰ Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use; Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity; Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services; Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building. Convention of Biological Diversity (https://www.cbd.int/sp/targets/)
- ¹¹ Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an inclusive, sustainable and just future Copyright © International Labour Organization 2019
- ¹² PROGRESS TOWARDS THE AICHI BIODIVERSITY TARGETS: AN ASSESSMENT OF BIODIVERSITY TRENDS, POLICY SCENARIOS AND KEY ACTIONS Global Biodiversity Outlook 4 (GBO-4) Technical Report. Copyright © 2014, Secretariat of the Convention on Biological Diversity
- ¹³ IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. XXX pages.

¹ Agenda 21 "UN Documents Cooperation Circles" - Earth Summit 1992

² In Bolensky (2011): See also, Moller, H., F. Berkes, P. O. Lyver, and M. Kislalioglu. 2004. "Combining science and traditional ecological knowledge: monitoring populations for co-management." *Ecology and Society* 9(3): 2. [online] URL: http://www.ecologyandsociety.org/vol9/iss3/art2/. Davis, M. 2006. "Bridging the gap or crossing a bridge? Indigenous knowledge and the language of law and policy." *In* W. V. Reid, F. Berkes, T. J. Wilbanks, and D. Capistrano, editors. *Bridging scales and knowledge systems: concepts and applications in ecosystem assessment.* Island Press, pp. 145-163.

¹⁴ Leaders' Pledge for Nature. Political leaders participating in the United Nations Summit on Biodiversity in September 2020, representing 84 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030

¹⁵ The Science-Policy Dialogue titled **"Towards living in harmony with nature by 2050**" was a dialogue between science, policy and civil society to discuss the role of science and policy in identifying the transitions needed, and to inform the post-2020 global biodiversity framework.

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