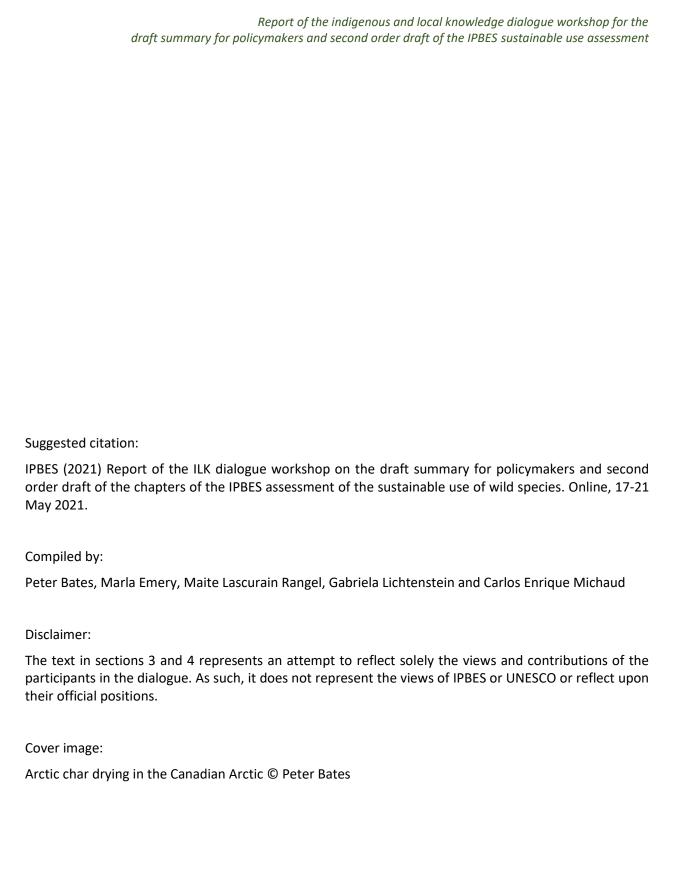
Report

Indigenous and local knowledge dialogue workshop on the draft summary for policymakers and second order draft of the chapters of the IPBES assessment of sustainable use of wild species

Online, 17-21 May 2021





Contents

1.	Intro	oduct	ion	5
	1.1.	This	report	5
	1.2.	Con	text of the ILK dialogue workshop	5
	1.3.	Obje	ectives of the ILK dialogue workshop	6
	1.4.	Resi	ults of the dialogue	6
	1.5.	Part	icipants	6
	1.6.	Prod	cess	7
2.	Bacl	kgrou	nd	8
	2.1.	IPBE	S and ILK	8
	2.2.	The	IPBES sustainable use assessment	9
	2.2.	1.	Objectives of the sustainable use assessment	9
	2.2.	2.	The assessment team	9
	2.2.	3.	Timeline for the sustainable use assessment	9
	2.3.	Mod	dalities of participation for IPLCs in the assessment process	10
	2.3.	1.	Introduction	10
	2.3.	2.	IPLCs in the assessment expert group	10
	2.3.	3.	Contributing authors	10
	2.3.	4.	Dialogue workshops	11
	2.3.	5.	Online reviews of drafts of the assessment	11
	2.3.	6.	Call for contributions	11
	2.3.	7.	Regular communications	11
	2.4.	Ben	efits to IPLCs of participating in the assessment	12
	2.5.	FPIC		12
3.	Ove	rarch	ing recommendations and learning from the dialogue	13
	3.1.	Ove	rall feedback	13
	3.2.	Sect	ion A: Why is sustainable use of wild species important?	13
	3.3.	Sect	ion B: What is the current status of wild species uses?	14
	3.4.	Sect	ion C: What promotes the sustainable use of wild species?	16
	3.5.	Sect	ion D: What do we need to do? What are the pathways to sustainability?	17
	3.5.	1.	Adaptation and revitalization	17

	3.5.2.	Government recognition and support	17
	3.5.3.	Research	18
	3.5.4.	Education and capacity building	19
	3.5.5.	Climate change and COVID	19
4.	Regiona	l discussions and examples	20
	4.1. Sec	tion A: Why is sustainable use of wild species important?	20
	4.1.1.	IPLC use as an integrated system	20
	4.1.2.	The importance of sustainable use for IPLCs	21
	4.1.3.	Recognizing the benefits of sustainable use of wild species	22
	4.2. Sec	tion B: What is the current status of wild species uses?	23
	4.2.1.	Sustainable use by IPLCs	23
	4.2.2.	Adaptability	24
	4.2.3.	Changes in available resources	24
	4.2.4.	Access to lands and resources	26
	4.2.5.	Conflict	28
	4.2.6.	Knowledge, language and education	28
	4.2.7.	Commodification	29
	4.2.8.	Wild and domestic species	30
	4.2.9.	Indicators and monitoring	31
	4.3. Sec	tion C: What promotes the sustainable use of wild species?	31
	4.3.1.	Customary governance and institutions	32
	4.3.2.	Management plans	32
	4.3.3.	Policy	34
	4.3.4.	Access	34
	4.3.5.	ILK and science	34
	4.3.6.	Sharing and protecting knowledge	36
	4.4. Sec	tion D: What do we need to do? What are the pathways to sustainability?	37
	4.4.1.	Overarching	37
	4.4.2.	Revitalisation of knowledge and culture	37
	4.4.3.	Recognition and support for customary governance	38
	4.4.4.	Participation	41
	4.4.5.	Policymaking	42

	4.4.6.	Links between international and national policy	42		
	4.4.7.	Research	43		
	4.4.8.	Education and capacity building	48		
	4.4.9.	Gender	49		
5.	Next ste	ps	50		
Annexes					
ļ	Annex 1: A	gendas	51		
ļ	Annex 2: F	PIC document	56		
,	Annex 3: P	articipants of the dialogue workshop	59		

1. Introduction

1.1. This report

This is the report on the indigenous and local knowledge (ILK) dialogue workshop for the first order draft of the summary for policymakers and the second order draft of the IPBES assessment of the sustainable use of wild species (the "sustainable use assessment"). It was held from 17-21 May 2021, online, due to the ongoing COVID-19 pandemic. The report aims to provide a written record of the dialogue workshop, which can be used by assessment authors to inform their work on the sustainable use assessment, and also by all dialogue participants who may wish to review and contribute to the work of the assessment moving forward.

The report is not intended to be comprehensive or give final resolution to the many interesting discussions and debates that took place during the workshop. Instead, it is intended as a written record of the discussions, and this conversation will continue to evolve in the course of the assessment process. For this reason, clear points of agreement are discussed, but diverging views among participants are also presented for further attention and discussion.

The text in sections 3 and 4 represents an attempt to reflect solely the views and contributions of the participants in the dialogue. As such, it does not represent the views of IPBES or UNESCO or reflect upon their official positions.

The agenda and participants list for the dialogue are provided in annexes 1 and 3.

1.2. Context of the ILK dialogue workshop

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) launched the sustainable use assessment in 2018 and it will run until 2022. The participation of indigenous peoples and local communities (IPLCs) is essential to the process of developing the sustainable use assessment, as IPLCs possess significant knowledge on the wild species that surround them. This includes knowledge about their habitat, seasonal availability, behaviour and interactions with the environment, other animals and humans. IPLCs often use wild species for subsistence and other purposes, and have management strategies and institutions that govern their sustainable use. The identities, cultures, language, rituals, ceremonies, food systems, medicines and livelihoods of IPLCs are often deeply intertwined with the use of wild species.

At the time of the dialogue workshop, the sustainable use assessment had reached an important milestone – the review period of the first order draft of the summary for policymakers (SPM) and second order draft of the chapters of the assessment. This review period ran from 15 April to 27 June 2021. This is one of the most important phases in the IPBES assessment process, as it allows scientists, decision-makers, practitioners, IPLCs and other knowledge holders to provide

feedback on these draft documents. The widest-possible participation and most diverse engagement in the external review is vital to ensure the quality and policy relevance of the assessment. The ILK dialogue workshop was organized to facilitate the participation of IPLCs in the review of these documents. More information on IPLC participation in the review process is set out in section 2.3.5 below.

This dialogue workshop continued the work of the first ILK dialogue workshop for the assessment, which was held in May 2019 in Paris, and the second dialogue workshop for the assessment, which was held in October 2019, in Montreal, Canada.

The dialogue workshops are part of a series of activities for working with IPLCs and ILK throughout the assessment process, in the context of the implementation of the <u>IPBES approach to recognizing and working with indigenous and local knowledge</u> adopted by the IPBES Plenary in decision IPBES-5/1.

1.3. Objectives of the ILK dialogue workshop

The aim of the dialogue workshop was to engage IPLCs in critically reviewing the draft SPM and assessment chapters, with a focus on SPM key messages. These reviews provided feedback to authors regarding strengths, gaps and additional sources of information. The results of the dialogue were entered into the review process of the assessment as a series of review comments, for the attention of the author teams as they further develop the SPM and the assessment chapters.

Additional aims included sharing knowledge about sustainable use of wild species between IPLC participants and assessment authors, and exploring how the final assessment could be utilized by IPLCs.

1.4. Results of the dialogue

Anticipated results of the dialogue included a series of comments from IPLCs that will be entered into the assessment's review process, and a publicly available report (this report) that will serve as a resource for authors, participants and others interested in the subject of IPLCs and sustainable use.

1.5. Participants

Participants included ILK holders and ILK experts from IPLCs, as well as co-chairs and authors from the sustainable use assessment.

1.6. Process

The dialogue ran over five days, with four regional sessions at different times to suit different time zones, followed by a plenary for all regions, as follows:

- Group session: Americas (in English)

 Monday, 17 May 2021, 7 p.m. to 10 p.m. Central European Summer Time
- Group session: Africa and Europe (in English and French)

 Tuesday, 18 May 2021, 1 p.m. to 4 p.m. Central European Summer Time
- Group session: Latin America (in Spanish)

 Wednesday, 19 May 2021, 6 p.m. to 9 p.m. Central European Summer Time
- Group session: Asia-Pacific and Oceania (in English)
 Thursday, 20 May 2021, 5 a.m. to 8 a.m. Central European Summer Time
- Plenary session (in English and Spanish with interpretation)
 Friday, 21 May 2021, 2 p.m. to 4 p.m. Central European Summer Time

During the dialogue, key messages from the SPM of particular relevance to IPLCs were presented by assessment authors, and participants were invited to discuss and comment. The agendas for the sessions are given in annex 1.

Comments made during the dialogue were compiled in the assessment's formal review template, including overarching comments from the dialogue and a series of comments from each regional session. Workshop participants were invited to review these comments, and following additional edits and no objections from participants, these were submitted to the IPBES secretariat on 24 June 2021.

This report complements the comments that were entered into the review process, serving as a more comprehensive written record for the use of IPBES authors, dialogue participants, and others interested in the subject of IPLCs and sustainable use of wild species.

2. Background

2.1. IPBES and ILK

IPBES is an independent intergovernmental body established to strengthen the science-policy interface for biodiversity and ecosystem services towards the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.

Since its inception in 2012, IPBES has recognized that IPLCs possess detailed knowledge on biodiversity and ecosystem trends. In its first work programme (2014-2018), IPBES built on this recognition through deliverable 1 (c): *Procedures, approaches and participatory processes for working with indigenous and local knowledge systems*. As part of its work programme up to 2030 IPBES has objective 3 (b) *Enhanced recognition of and work with indigenous and local knowledge systems*, which aims to further this work.

Recognizing the importance of ILK to the conservation and sustainable use of ecosystems as a cross-cutting issue relevant to all of its activities, the IPBES Plenary established a <u>task force on indigenous and local knowledge</u> and agreed on <u>terms of reference</u> guiding its operations towards implementing this deliverable. IPBES work with IPLCs and on ILK has also been supported by a technical support unit on ILK, hosted by UNESCO.

Key activities and deliverables so far include:

- Progress in the development of approaches and methodologies for working with ILK was made during previous IPBES assessments (of Pollination, Pollinators and Food Production, Land Degradation and Restoration and four Regional Assessments and a Global Assessment of Biodiversity and Ecosystem Services);
- The development and implementation of the "approach to recognizing and working with ILK in IPBES", which was formally approved by the Plenary at its fifth session in 2017, and which sets out basic principles for IPBES's work with ILK;
- Development and implementation of methodological guidance for recognizing and working with ILK in IPBES, which aims to provide further detail and guidelines on how to work with ILK;
- Development and implementation of a "<u>participatory mechanism</u>", a series of activities and pathways to facilitate the participation of IPLCs in IPBES assessments and other activities;
- Organizing <u>ILK dialogue workshops</u> for the assessments, most recently for the assessments on sustainable use of wild species, values of nature, and invasive alien species.

2.2. The IPBES sustainable use assessment

2.2.1. Objectives of the sustainable use assessment

At its sixth session (IPBES 6) in Medellin, Colombia in 2018, the IPBES Plenary approved the undertaking of a thematic assessment of the sustainable use of wild species.

The objective of the assessment is to consider approaches that enhance the sustainable use of wild flora, fauna, and fungi within the ecosystems they inhabit and strengthen practices, measures, capacities and tools for their conservation.

It is solution-oriented, with the overall aim of identifying challenges and opportunities to ensure and promote the sustainable use of wild species. You can read more about the assessment here.

2.2.2. The assessment team

The assessment team includes three co-chairs, 15 coordinating lead authors, 52 lead authors, 11 fellows and 12 review editors, from 37 different countries

2.2.3. Timeline for the sustainable use assessment

IPBES launched the sustainable use assessment in 2018, which will be completed in 2022. Key milestones include:

- December 2018: Launch of the assessment and first author meeting
- 20-21 May 2019: First ILK dialogue workshop (Paris)
- August-October 2019: First order draft review period
- 8-9 October 2019: Second ILK dialogue workshop (Montreal, Canada)
- November 2019: Second author meeting
- 15 April to 10 June 2021: Second order draft and summary for policymakers review period
- 17-21 May 2021: Third ILK dialogue workshop
- July 2021: External review workshop
- July 2022: Completion and launch of the assessment at IPBES 9



Figure 1: Timeline of the sustainable use assessment

2.3. Modalities of participation for IPLCs in the assessment process

2.3.1. Introduction

In line with its approach to recognizing and working with indigenous and local knowledge, IPBES has worked to develop a series of activities and methodologies by which IPLCs can participate in IPBES assessments. These are outlined below.

2.3.2. IPLCs in the assessment expert group

IPBES assessments include ILK experts, i.e., persons from IPLCs who have knowledge about ILK and associated issues, and experts on ILK, i.e. persons who have knowledge about ILK and associated issues, but who are not necessarily members of IPLCs.

2.3.3. Contributing authors

IPLCs can also be invited to participate as contributing authors in support of an author of the assessment. This can include providing case studies that illustrate key issues or themes of an assessment, or working on portions of text, graphs or illustrations with assessment authors.

Contributing authors provide targeted support to an author, upon his or her request, focusing on a specific part of a chapter, or a specific table or figure. They are listed as a contributing author only if their input is included in the final report.

2.3.4. Dialogue workshops

Dialogue workshops with IPLCs and assessment authors are a key activity for IPLCs' participation. There have been three dialogue workshops during the assessment cycle, at key points in the process, as follows:

- A first dialogue, which discussed the early development of the assessment, approaches and key ILK questions for each chapter (6-7 May 2019, at UNESCO in Paris);
- A second dialogue, during the first external review period. The dialogue engaged IPLCs in reviewing the content of the draft of the assessment chapters, to assess strengths, gaps, and provide recommendations for additional sources of information (8-9 October 2019, Montreal, Canada);
- A third dialogue (the subject of this report) was held during the second external review
 period and engaged IPLCs in critically reviewing the content of the draft chapters and
 summary for policymakers (17-21 May 2021, online).

2.3.5. Online reviews of drafts of the assessment

IPLCs can engage in the two external reviews of drafts of assessments listed in the previous section. Drafts are made available on the IPBES website, usually for a six to eight week-period. The IPBES secretariat sends out a notification announcing the availability of the draft for review. Each comment submitted is specifically addressed by the assessment author teams, and review comments and responses are posted online after the Plenary session that accepts the draft assessment report.

IPBES encourages collaboration among IPLCs or their organizations to create group consensus comments. As mentioned above, IPBES will hold dialogue workshops during both review periods to further facilitate IPLC participation in this process.

2.3.6. Call for contributions

An on-line call for contributions was launched for the sustainable use assessment on 12 June 2020 with a deadline of 15 September 2020. The aim was to provide a further avenue for IPLCs to provide information or case studies, and also to recommend networks, organizations or individuals who could become involved in the assessment process. Contributions included community reports, academic papers, case studies, videos, songs and artwork. The call was made available in English, Spanish, French, Russian and Arabic.

2.3.7. Regular communications

The ILK and sustainable use technical support units aim to maintain good communications with dialogue participants about the development of the assessment and opportunities for participation and further development of case studies and reporting from the meeting.

IPBES also aims to pay special attention to IPLCs when working on outreach and information sharing, especially once the assessment is finished.

2.4. Benefits to IPLCs of participating in the assessment

During previous workshops, participants noted that if IPLCs are invited to participate in the assessment process, there should be clear benefits for them. Key benefits discussed included:

- The opportunity for IPLCs to share experiences with other IPLCs around the world about sustainable use and decision-making, as well as discussing with researchers;
- Use of the final assessment as a tool when IPLCs are working with policymakers, decision-makers and scientists around sustainable use, noting that part of the planning for the final assessment includes the development of an accessible summary for IPLCs; and
- The opportunity to bring IPLC knowledge, values, institutions, challenges and proposed ways forward to the attention of policymakers and decision-makers.

2.5. FPIC

Free, prior and informed consent principles are central to IPBES work with IPLCs, and a series of ethical principles and have been developed to ensure that FPIC is followed in IPBES activities. These principles were agreed upon by the participants of the dialogue, and will be followed by both IPLC participants and assessment authors. The full agreed-upon text and the names of those agreeing to these principles are provided in annexes 2 and 3 to this report.

3. Overarching recommendations and learning from the dialogue¹

Over the course of the dialogue, IPLC participants made a series of comments and recommendations for the draft summary for policymakers and second order draft of the assessment, for the consideration of assessment authors. The section below sets out the overarching comments provided by the participants.

3.1. Overall feedback

Participants recognized the good work done by the assessment authors, and noted that previous workshop results had been integrated into the SPM. They expressed hope that the assessment will capture the recommendations raised in the current workshop.

They also noted that it is important to recognize diversity across different areas and communities. For example, in Canada alone there are many different tribes and nations.

3.2. Section A: Why is sustainable use of wild species important?

After a brief presentation on Section A of the SPM, which discussed why sustainable use of wild species is important, IPLC participants in the different regional discussions provided the following overarching comments:

- Participants highlighted that it is important to explore how sustainable use is conceptualized by IPLCs, as this may be different from conceptualizations found in scientific literature.
- It is essential to convey the fundamental importance of spirituality and that the different uses of wild species are an integrated system (in both text and figures in the SPM).
- Use of wild species is often fundamental to IPLC spiritual connections to the land, waters, animals, plants and sky. Uses of wild species are also fundamental to culture, identity, language, health and well-being of communities, as well as to livelihoods and economies.

¹ Disclaimer: The text in section 3 represents an attempt to reflect solely the views and contributions of the participants in the dialogue. As such, it does not represent the views of IPBES or UNESCO or reflect upon their official positions.

For many IPLCs, intrinsic values of nature, including sacred, religious, symbolic and spiritual values, are key.

- As part of this spiritual connection and community well-being, wild species are also used for food, medicine, clothes, ceremonies, clan totems, canoes, crafts, and ceremonial places and objects.
- Wild species are also eaten by pastoralists' livestock (e.g., in Uganda) and are recognized for their importance in pollination of crops and other plants. They are also used as indicators of changing seasons, rains and, increasingly, climate change.
- Sustainable use of wild species by IPLCs is a two-way relationship, which also improves the health and wellbeing of wild species.
- Consuming wildlife may be more sustainable and healthier than consuming domestic cattle and other animals that have both deforestation and methane footprints. This needs to be highlighted, as often use of wild species is viewed negatively.
- In some cases, the same wild species are eaten by many communities across the world (e.g., insects in Africa and Latin America). This can help connect different communities and promote learning and sharing.

3.3. Section B: What is the current status of wild species uses?

After a brief presentation on Section B of the SPM, which explored the current status of wild species uses, IPLC participants in the different regional discussions provided the following overarching comments:

- IPLCs continue to play an important role in maintaining species abundance and health.
- This occurs through their sustainable use of resources, mediated by ILK and customary governance systems (e.g., of salmon rivers in Finland).
- Often communities are managing whole landscapes and systems (e.g., watersheds in Philippines) rather than a single species.
- Species often benefit from ecosystems created by people (e.g., biodiversity benefits from forest mosaics in Thailand).
- Protection of landscapes and species, and therefore sustainable use, can also occur through active opposition by IPLCs to industrial development and environmental destruction.
- For many IPLCs, sustainable use includes also all the intangible uses of wild species by IPLCs, including spirituality, reciprocity and respect, which maintain the social-ecological system.

- The mobility of pastoralists' livestock herds is managed by pastoralists through their ILK of the environment (e.g., in Uganda). This supports sustainable use of wild species, so that resources in one area are not exhausted and can regenerate.
- ILK is dynamic. Communities can embrace new technology (e.g., guns) whilst maintaining ILK and values.
- However, much knowledge is encoded in connections between lands, wild species, practice (including food, livelihood and spiritual practices), and language. When communities lose land and water-based practices, they can start to lose their knowledge and language. Losing knowledge and language can in turn lead to deterioration of species and lands due to declines in sustainable use.
- Industrial development (e.g., mines, pipelines, oil tankers), large scale agriculture (e.g., on the Great Plains of North America), urbanization, over-harvesting by non-indigenous people, climate change and environmental degradation are all putting pressure on communities' sustainable use of resources.
- Participants noted that IPLCs often do not have full and effective participation in national and local governments around the management of species. Governments often do not hear or include consideration of ILK in their decision-making.
- Participants noted that governments often impose regulations on resource use and access by IPLCs, making sustainable use difficult or impossible. A large number of ancestral areas that are fundamental to IPLC spirituality and livelihoods are now in protected areas. IPLCs are rarely consulted on the development of regulations and conservation strategies that will impact their sustainable use.
- Participants highlighted that government regulations or management systems also often undermine IPLC customary institutions and management systems, for example by superseding elders' councils with wildlife management boards, which then often leads to worse outcomes for communities and wild species.
- "Western" or formal education systems often undermine ILK and teach different value systems to IPLC youth.
- In border society, there is often a general lack of understanding and recognition of ILK and traditional practices, management and institutions (which can be particularly contentious around concerns for animal rights). This can lead to diminished pride within communities and reduced efforts to transmit knowledge and value systems.
- Commodification and outside economic pressures can be a significant threat to IPLC values and ways of relating to wild species. However, communities which have maintained strong value systems and customary governance can engage in the market while maintaining their values for sustainable use.
- Qualitative and quantitative indicators are needed, which should be developed and defined with IPLCs, in order to monitor trends in sustainable use, including the full range

of social and ecological factors involved. Capacity-building may also be needed for IPLCs to develop and manage their own systems for monitoring and for storing and sharing information on their own terms.²

3.4. Section C: What promotes the sustainable use of wild species?

After a brief presentation on Section C of the SPM, which explored the promotion of the sustainable use of wild species, IPLC participants in the different regional discussions provided the following overarching comments:

- Customary institutions, laws, systems, taboos and other measures have often maintained biodiversity for hundreds of years. For many IPLCs, customary law promotes sustainability, and is also a way to ensure the full and effective participation of IPLCs in wildlife management.
- Communities have in some cases developed protocols and management plans to govern resources on their lands, with the aim of managing resource use by community members and by people and entities from outside of the community, including business and industry (e.g., Tsilhqot'in in Canada, see section 4.3.2 below). Increased recognition and support by national and local governments would further enhance their effectiveness.
- Co-production of knowledge is very important. However, true co-production is not easy and there are few good examples. In many examples, science provides the research framework, IPLCs are required to work within scientific frameworks and methods, and as a result ILK can be left out or misrepresented. There is also a tendency by biologists to try to validate ILK using scientific methods. Power imbalances therefore need to be highlighted and addressed within co-production processes.
- Participants noted that often researchers without a background or training in working with ILK will undertake research projects on ILK. However, only people with expertise in ILK processes and methods should be involved in co-production or research, to help to ensure good practices.
- For all the reasons given above, indigenous-led research using indigenous methodologies
 may be more effective for working with ILK, rather than attempting true co-production,
 as co-production may not be enough for a full recognition of ILK.
- Some IPLCs are now developing their own assessments, using ILK that is validated by elders rather than science (e.g., Northern Australia around dugongs and turtles, see section 4.3.5 below).

² To read more on indicators and IPLCs: De La Cruz, P. et al. 2020. Indicators of well-being among indigenous peoples of the Colombian Amazon: Tensions between participation in public policy making and autonomy. *Environmental and Sustainability Indicators*. 7, 1–14. https://doi.org/10.1016/j.indic.2020.100044.

- Some IPLCs are developing community-based monitoring and information systems (CBMIS). This provides crucial information for management, and also capacity-building to IPLCs (e.g., around community governance and management committees). Communities often see the impacts of policies on the ground (e.g., connections between spraying to kill mosquitoes and loss of pollinators in the Caribbean), and such monitoring can therefore be a resource for adaptive policymaking.
- Co-management is also important, but can similarly be based on western models and assumptions. Power imbalances also need to be explicitly addressed in this sphere.

3.5. Section D: What do we need to do? What are the pathways to sustainability?

After a brief presentation on Section D of the SPM, which explored pathways to sustainability, IPLC participants provided the following overarching comments across the different regional discussions.

3.5.1. Adaptation and revitalization

- Many communities are trying to revive ancestral relationships with land, water and sky.
 They need their spiritual places and species with them to do this (for example "brother buffaloes" on the Great Plains of North America).
- Communities can adapt to a changing world, while maintaining their values of spirituality, responsibility, reciprocity and respect. In this way they can continue or revitalize sustainable use to benefit people and nature.
- Communities can find ways to market their traditional products in sustainable ways, and this can enhance respect for traditional use inside and outside of communities (e.g., honey in northern Thailand, see section 4.2.8).
- Networks and agreements across local, national and international scales are needed between IPLCs (e.g., communities living across international borders)

3.5.2. Government recognition and support

- Participants highlighted that ILK and IPLCs' contributions to sustainable use and conservation initiatives need to be recognized at the national level, as a high percentage of biodiversity is found in indigenous territories.
- Customary institutions are key to sustainable use and community wellbeing for IPLCs, and
 can provide an effective means of managing biodiversity on the ground. A key
 recommendation from IPLC dialogue participants was that IPLCs may need government
 recognition of existing customary institutions, and in many cases these systems and
 institutions may also need to be supported, strengthened or reintroduced.

- IPLCs may also need other partnerships, documentation of knowledge and practices and innovative use of technologies in order to support their efforts to continue, enhance and revitalise sustainable use.
- Participants highlighted that it is important for countries to guarantee the rights of indigenous peoples to the customary use of species that are in their lands and territories.
 Land tenure and access are key within this.
- As a way of enhancing community control over their lands and waters, permitting and harvesting rights can be controlled by IPLCs, including harvesting permits for nonindigenous peoples.
- Article 10 (c) of the Convention on Biological Diversity (CBD) establishes that countries should generate public policies that promote sustainable customary use. However, in most countries there are still no such laws or mechanisms, and participants highlighted that these should be developed.
- Participants noted that it is necessary to co-design such policies with IPLCs and their organizations. Consultation and participation are essential.
- Participants highlighted that the roles of IPLC women in customary use and management should be recognised, as should their knowledge, practices and innovations and traditional occupations.

3.5.3. Research

- Much ILK is undocumented, partly due to the complex nature of ILK. Research is needed, and funding and capacity-building could be provided for communities to do this work themselves in culturally appropriate ways.
- Support for community-based monitoring can form important connections between communities and governments, providing much needed on-the-ground information for decision-makers at all levels.
- Many IPLCs are happy to share knowledge and stories if it is done in a respectful way, and
 if they are not pressured to compromise their ways of being and knowing and their
 relationships with the land.
- Fears over misappropriation of knowledge may, however, make IPLCs wary of sharing knowledge, if trusted protocols are not in place.
- Participants highlighted that mechanisms are needed to ensure full and effective participation by IPLCs, including women and elders, and to protect intellectual property and ensure benefits to communities from research and sharing of ILK.
- Trust can also be essential for building research relationships and fruitful exchanges around ILK. This can partly be built by spending time in communities and with IPLCs on their lands and waters.

3.5.4. Education and capacity building

- Participants highlighted that education is key for maintaining and enhancing sustainable
 use by IPLCs. To this end, intergenerational transfer of knowledge needs to be enhanced,
 through both formal and informal education, and enhancing customary modes of
 knowledge transmission is important. Future generations of resource users and managers
 may need to learn both ways of knowing; ILK and science.
- Participants highlighted that youth should also be engaged in research and governance wherever possible, so they can learn these skills.
- Capacity-building may be needed for IPLCs to participate in management boards and committees. In some cases, culturally appropriate capacity-building may be needed for women to engage in governance.
- Community pride in their knowledge and governance may also need to be enhanced, through education and outreach within communities and through better recognition outside of the community.
- Participants noted that education and capacity-building is also needed throughout education and decision-making systems for non-indigenous peoples, including governments and researchers, so that they can better recognize and work with ILK and IPLCs.

3.5.5. Climate change and COVID

 Exploring how climate change and COVID-19 have impacted and influenced the use of wild species could be very important. The use of wildlife has been blamed for the origins of the COVID pandemic. However, the use of wildlife can be an opportunity for sustainability and maintaining culturally appropriate practices, so these messages need to be balanced and nuanced.

4. Regional discussions and examples³

During the workshop, in response to the presentations on the SPM, participants provided many comments and examples of the importance of sustainable use by IPLCs, the ways that IPLCs practice sustainable use, challenges and ways forward. These examples are given below. As much as possible, the text reflects what was said during the workshop by participants, with only minimal editing.

4.1. Section A: Why is sustainable use of wild species important?

After a brief presentation on Section A of the SPM, which discussed why sustainable use of wild species is important, the following examples and comments were provided by IPLC participants, alongside the general comments presented above in Section 3:

4.1.1. IPLC use as an integrated system

- A participant from Australia noted that sustainable use of wild species is important because some wild species in Australia are endemic. The use of wild species maintains these species. "Use" in this context is not just material, physical use, because wild species are both "tangible" and "intangible" cultural heritage. This is terminology that could be used in the assessment. Also, in Australia there has been discussion about some species being culturally significant species.
- A participant from **Bolivia** highlighted that it is important to emphasise that the material and the cultural aspects of sustainable use are not separate for indigenous peoples this is vital. Although it is difficult to put it into words, because it is complex, the symbolic aspect of species with an impact on both the material (food, clothing, etc.) and cultural aspects of communities should be emphasized. They are not separate; they are closely linked. Languages are also very important, and experience with the environment, especially with wild species, is fundamental, as it helps to form IPLC languages. Experience with wild species is also the foundation for the construction of identity, including of young people and women.
- A participant from **Fiji** highlighted that cultural keystone species, including totemic species, are highly important and need attention. The link between these wild species and

³ Disclaimer: The text in section 4 represents an attempt to reflect solely the views and contributions of the participants in the dialogue. As such, it does not represent the views of IPBES or UNESCO or reflect upon their official positions.

their cultural importance needs to be explored, as they are more than just food or medicine. They have intangible and tangible value.

- A participant from Nepal reported that for many IPLCs, wild species are known within indigenous languages, and they can communicate with these species. Wild species are not only used for food and medicine but also for religion, rituals, ceremonies, symbols, identities and communication with the whole ecosystem. Before using wild species, indigenous peoples can communicate with mother nature to express and explain their wishes, purpose and needs in their own language. Indigenous peoples hold an intangible relationship with nature and wild species through their religions and practices, and this plays vital roles in sustainable use. Some wild species are sacred for IPLCs, and are associated with the customary systems of these societies. Such valuable wild species are also domesticated and used by IPLCs.
- A participant from the **Philippines** noted that it is important to highlight the relationship between IPLCs' sustainable use of wild species, values, spirituality, ritual and ceremony.
 Values should particularly be emphasized, because the values emanating from spirituality are directly related to sustainable use of wild species.
- A participant from the United States explained that the Salmon People of the Pacific coast are trying to bring life back to the rivers, and protect the ocean from further destruction from pipelines and oil tankers. In their region, most actions with indigenous peoples begin with the spirit; they first recognise spirit in everything that they do. For indigenous peoples, benefits from sustainable use, such as food, medicines, language and spirituality, are integrated in a system, as one. When spirit is brought into the work it is clear that everything is sustainability, in the practice of gratitude, and of leaving something for the next generation. In the English language things are divided up, but in native languages everything is connected, and spirit comes first.
- Another participant from the **United States** highlighted that is important to emphasize
 that all aspects of sustainable use are interconnected in many ways. For example:
 medicines and food are connected to spirituality, ritual, and ceremony. Language is very
 much connected to the land.

4.1.2. The importance of sustainable use for IPLCs

- A participant from Argentina explained that wild species use contributes to genetic diversity and climate change adaptation. Wild species also give IPLCs indicators of climate change and are therefore extremely important for climate change mitigation and adaptation.
- A participant from Kenya noted that it is important to also consider wild insects since they
 are used for various purposes including food and medicine. For instance, in the Pokot
 community they help with the prediction of weather. Plants are also very important for
 their food and medicinal values.

- A participant from Mexico noted that in some communities in tropical America (and in other parts of the world) insect collecting is very important, but there are restrictions placed on this.
- A participant from Uganda explained that for Karamoja pastoralist communities, wild species are the backbone of society. Nature or wild species are used as crucial resources, for instance they provide areas for conducting meetings and making decisions for communities. Karamoja communities also make artefacts from wild species that are viewed in museums and sold in the market to boost the economy of the communities. They also have many other uses for wild animals and plants. A good example is the Balanites aegyptiaca tree (desert date) (Ekorete in N'gakarimojong) that has many important uses: firewood, fuel, poles, timber, utensils, tool handles, food (fruit, leaves), medicine (roots, bark, fruit), mulch, shade, windbreak, gum, fencing (branches), oil (fruit), fish poison, necklaces (seeds), and soap (bark). Territorial identity and solidarity of the ten Karamoja clans are identified by wild animal types e.g. TOME (elephant), MAZENIKO (bulls), MOGOZ (a mountain), MOZINGO (the rhinoceros), KOZOWA (the buffaloes), BOKORA (Turtle), MUNO (the snakes), and PEI (wild dogs), etc. The skins of these animals are worn and used as ornaments. For the IPLCs, developing indigenous artefacts and ornaments from wild species can be a good initiative to promote skills and a sense of ownership, and to make items to trade in the markets. They use types of plants that do not decay so the artefacts last a long time. As such, Karamoja pastoralists cannot live without wild species. Pastoralists also depend on livestock, which they consider as part of wild species, to enhance their livelihoods. Livestock are daily food, and communities benefit from the meat and clothing. They cannot get married without an animal skin, and also payment of dowry is mainly based on livestock. Sometimes, livestock keeping is gendered, i.e., men prefer the bigger livestock while women own and look after goats, sheep and chickens.
- Another participant from Uganda explained that the wild species in use in Karamoja include plants and animals. The common uses of indigenous plants include medicinal purposes, art and crafts, building and food. It is always important for pastoralists to preserve, conserve and protect wild species that are of importance to livestock and humans in a variety of ways. Most wild plants found in the shrines can never be disturbed or even harvested because they are attached to spirits.
- A participant from Ukraine noted that in eastern Europe, wild species are important art, handicrafts, clothing, spirituality and rituals. Important knowledge is passed through the generations about how to make them.

4.1.3. Recognizing the benefits of sustainable use of wild species

• A participant from **Mexico** made the following observations:

Wildlife consumption should not be linked exclusively to marginalised or subsistence economy communities. Wildlife is not something that only low-income people consume. For example, currently the market for "bushmeat" in Mexico is quite

significant (so much so that some species are trafficked). The conceptualization could instead be that sustainably managed wildlife is a source of protein and decent income for IPLCs.

It is also important to note the importance that wildlife has taken on in relation to food, not only locally and internationally, but in relation to issues of sustainability and healthy food. The question of culturally adequate food is important, as there can be changes in lifestyle when people go from rural areas to the city. In rural areas wildlife is often the only source of protein, but now indigenous peoples are often living in urban settings where often they eat beef and other domesticated species. IPLCs co-evolved with their environment and this is relevant to IPLC diets, as there is a greater assimilation of nutrients from species consumed ancestrally. It is also very important to emphasize the spiritual, cultural and cosmogonical aspects.

In general terms, the relationship between biodiversity and pandemics should be noted. The use of wildlife should not be seen as wrong, except when it is done in unsustainable ways, without biosafety measures. It is of concern that there are disincentives to eat bushmeat, which is sometimes IPLCs' primary source of protein. Consuming wildlife can be more sustainable than eating cows, pigs and other animals that cause deforestation and methane footprints. In short, the problem is not the consumption of wildlife, but the lack of biosecurity measures in its management. The solution is not therefore to reduce the demand for wild meat or "bushmeat", because for IPLCs this is a cultural and co-evolutionary issue and because it is more dangerous for the planet and wildlife to change land use from rainforest to a grazing area.

4.2. Section B: What is the current status of wild species uses?

After a brief presentation on Section B of the SPM, which explored the current status of wild species uses, the following examples and comments were provided by IPLC participants, alongside the general comments provided above in Section 3.

4.2.1. Sustainable use by IPLCs

• A participant from Argentina noted that it is clear today that customary sustainable use of biodiversity has contributed to its conservation. IPLCs have not put a large number of wild species at risk of extinction; on the contrary, IPLCs protect and care for them. It is important not to conclude that uses by IPLCs "are not always sustainable", as this can be taken in a very negative way against IPLCs, and could threaten the livelihoods and activities of IPLCs who depend on wild species for their livelihoods. Countries could prohibit communities from accessing their food, remove them from their lands, change their lifestyles and cause serious damage to biodiversity. It should be taken into account that many countries have laws to protect animals and plants for which IPLCs have customary uses. So, it is often claimed that IPLC use is not sustainable, while in practice the use of the rest of the population is unsustainable because animals are killed for

recreational purposes or for sport, which is forbidden in many IPLC communities. Some communities have lost their lands because of the creation of protected natural areas and bans on access for people to obtain plants and animals. For IPLCs, this is what can be considered unsustainable.

- A participant from Costa Rica gave an example of sustainability in the economy of the Brunka people the use of a mollusc known as múrice.⁴ The Brunka extract a liquid from múrice to dye white cotton purple. 80% of the community lives from this income. This use does not mistreat or destroy the mollusc, for afterwards it is left back on the rock where it lives. It is important to highlight that there are often differences between the state's conceptual approach to "sustainable use" and that of the IPLCs, and these need to be reconciled.
- A participant from the **Philippines** noted that sustainable use of wild species is an
 important component of the health and management of an ecosystem, which is mediated
 through the relationship between wild species and IPLCs. IPLCs often consciously and
 explicitly express that this relationship is part of the conservation and management of
 lands, territories and ecosystems.
- A participant from Uganda explained that mobility of wild and domestic animals (the latter is managed by pastoralists) is also one way of enhancing sustainable use of wild species, and it is believed that this helps in maintaining ecosystems and increasing wild species.

4.2.2. Adaptability

• A participant from Taiwan noted that it is important to recognize that ILK is developed and refined generation after generation. Often there are issues raised with IPLCs using new equipment, including guns, to hunt. Some people say guns are not traditional equipment so IPLCs should not use them. But, this neglects the fact that ILK systems can embrace new technologies and situations that IPLCs encounter, and make them part of their social order. If they can maintain their control over their traditional territory, then even when using new equipment they can maintain the landscape.

4.2.3. Changes in available resources

A participant from Antigua and Barbuda explained that community lands in Antigua are
often not sited in formally protected areas. She noted that it is positive that the post-2020
Global Biodiversity Framework may highlight other effective area-based conservation
measures, as this will increase recognition for how local people are conserving these
areas. At present, these areas can be cleared of trees by outsiders, or there can be use of

⁴ This article that discusses the use of the mollusc could be included in the assessment: https://revistas.tec.ac.cr/index.php/trama/article/view/5571/5322.

chemicals, but these areas are where local species and pollinators are found. A lot of these wild species are used for medicines, and with COVID-19 the use of wild species for food has been increasing. IPLCs need to be observant and proactive to inform the governments if they are disrupting important areas, and often they will appreciate the information.

- A participant from Australia explained that Australia has boom-bust cycles of some animals, including periods where there are large numbers of kangaroos. Some communities eat kangaroos. However, often non-Aboriginal people are sent out to cull these animals. Meanwhile, Aboriginal communities are being requested not to hunt many kangaroos and emus. There is great waste of food during a cull, and this is a missed opportunity for Aboriginal people, including for creating businesses around the use of kangaroos.
- A participant from **Canada** shared that the community of Tsilhqot'in consider that their role is to protect and fight for the survival and protection of their cultures and lifestyle. The community of Tsilhqot'in won aboriginal title in 2014, which provides a starting point from which to push for their values to be incorporated into government laws and policies, for example to bring back salmon. In the past, the community had the most consistent sockeye salmon run on the Fraser River, and the furthest travelling steelhead trout, but this changed recently. The woodland caribou, the most southerly woodland caribou in the world, are now on the brink of extinction. Moose populations are declining. Government policies are not effective in ensuring sustainable management of natural resources. When salmon decline, the community lose their ability to share their knowledge and pass their teachings to the next generation, and with that their language, their laws and their sense of being also decline. The community are therefore passionate about continuing to enjoy their territories, and will fiercely protect their resources. They are happy to share the resources, but others coming into their territory should respect the community's way of being and values, and honour these. The community strives to keep mining companies out of their territories to ensure clean water, for without clean water they cannot have healthy fish stocks. Money does not define their culture; the most important thing is making sure they have a healthy food source.
- A participant from Fiji noted that there is also a need to assess ways to prevent the loss
 of wild species, bringing out indigenous ways of sustaining species. Regarding the collapse
 of fish stocks, perhaps the loss of ILK leads to the collapse, or it could be the other way
 round. This link between knowledge and sustainable use is key.
- A participant from Finland noted that due to climate change, some customary sustainable
 practices of IPLCs may require some adjustment, as ecosystems are changing
 dramatically. For example, the salmon fish stock in one community has declined rapidly,
 yet fishing activities have not increased. There are many external forces that impact IPLC
 practices and use of resources.
- A participant from **Mexico** highlighted that sometimes it is external demand that affects wild species. For example, in Mexico, "shamanisation" puts pressure on peyote or

Psilocybe mushroom populations, but this is not an issue caused by indigenous communities.

- A participant from **Sweden** reported his experience that wildlife management in Sweden is causing an ecological collapse. In the treeless mountains, the reindeer and the reindeer calves have no chance against the sea eagle and the golden eagle. The eagles are protected by Swedish legislation as an endangered species. *Girunat*, the ptarmigan (a wild species), are not abundant. It would help their numbers if their hunting was restricted, but any limitations proposed are met with strong resistance, as was seen with a proposal on shortening the hunting season. *Girunat* needs protection, just like the eagles. Eagles of course need to be present in an acceptable number. Reindeer and reindeer calves should not need to be predator food. As there is no biodiversity, the eagles have nothing else to eat other than reindeer calves, while *girunat* are being shot by ptarmigan hunters.⁵
- A participant from **Uganda** highlighted that wild species are threatened by modernisation, globalisation, industrialization and environmental degradation. Pastoralists have challenges sustaining and managing wild species as a result of these pressures.
- A participant from **Ukraine** noted that economic pressure (both on lands and on resources) is greatly influencing the sustainable use of wild species by local communities, including through clear cutting and other pressures on resources.
- A participant from the United States highlighted that sustainability and sustainable use of wild species is very important since it is connected to the survival of indigenous languages and cultures. For example, paper birch trees are important to the culture and languages of some indigenous peoples, and there are many stories about them. Indigenous people use paper birch trees to make birch baskets, birch medicine and birch canoes. However, recently there is a huge market for birch poles, leading to overharvesting of birch trees. As a result, the indigenous peoples lose larger birch trees for canoe construction. A community did a moratorium so that there is no longer harvesting of birch poles within their reservation boundaries, but it is hard to control activities in state or federal lands. The community need to be able to sustainably harvest and curate this resource for future generations. If the paper birch is gone, the community will no longer be able to tell the stories about the birch to their children. It is a direct connection to their language and culture.

4.2.4. Access to lands and resources

• A participant from **Bolivia** explained that in Bolivia, indigenous people have been penalized for the use of *parihuana* (Andean flamingo), which is a wild water bird; the fat is part of indigenous medicine. These are difficult perspectives, for which a balance has

⁵ More can be read here (in Swedish): https://www.facebook.com/erik.fankki/posts/4026365774121936

to be found. What distinguishes sustainable use by indigenous peoples in particular is the customary use that allows for an emphasis on practices that have been passed down from generation to generation and have value for the community collectively and for the environment.

- A participant from **Colombia** noted that there are countries where IPLCs are increasingly limited in their access to natural resources or territories. There are real damaging effects on communities who are managing wildlife when they are displaced by the establishment of protected areas, climate change and the loss of relevant traditional knowledge. In the Colombian Amazon, indigenous communities manage wild species by themselves, without support. Practising sustainable use does not therefore always mean "participating" with "others" who are undefined (the state, companies or transnationals etc.). It is not that collaboration cannot happen, but in general communities manage resources themselves without help.
- A participant from **Costa Rica** noted that a large number of ancestral areas are in state or private conservation areas, with no access for indigenous peoples.
- A participant from Mexico explained that indigenous peoples often use wild species sustainably. However, in some cases there is a lack of access to land, and this can cause unsustainability.
- A participant from **Mexico** also highlighted the establishment of natural protected areas or World Heritage Sites as an example of land tenure conflict, as they can lead to the displacement of IPLCs or limit their rights of use. In the World Heritage Convention process, it has been recognized that the establishment of protected areas can present a pattern of displacement of IPLCs. If IPLCs are removed from their territories, in one or two generations they can lose the knowledge about animals, plants and management. It is therefore necessary to rethink the protected areas scheme. The IPBES assessments indicate that IPLC practices are often compatible with conservation, so they should not be evicted. National legislations, policies and regulations are however often inconsistent with this evidence about best use. There is a need to try to reconcile these views with the evidence about best practices, and also to highlight the benefits when indigenous peoples are not evicted, to show that conservation and the presence of indigenous peoples are compatible. Some natural scientists believe in the concept of 'wilderness', and this is why it is important to include social scientists in assessments and policy processes to balance these views.
- A participant from **Thailand** explained that indigenous elders in their community say that three areas are needed to survive and live in harmony with nature: the settlement, land for farming, and forest for hunting and gathering. However, often now the communities cannot use the forest due to regulations. There are areas where IPLCs have increased numbers of wildlife in their territories. In Thailand, IPLCs often practice rotational farming / shifting cultivation, where after farming for one year they leave the area fallow for six to ten years. Animals and plants flourish in the fallow land, as places for feeding and hiding, and it is good for the community for hunting and gathering. The first few years of

fallow there will be small animals, and then after four or five years there will be bigger animals. Animals move between the forest and fallow areas, so this kind of forest creates space for wildlife. Now however there are laws which prohibit this process. The community have less food to eat, and many kinds of wildlife have disappeared. There is a need to understand that IPLCs have knowledge and practices that enhance the abundance of wild species. In Thailand there are also challenges with hunting wildlife, as it is banned by law, while some IPLCs are still practicing hunting, based on traditional ways and customary use. There is a gap in understanding and recognition. In forest areas, over hundreds of years, people developed customary laws, taboos, and knowledge on hunting and gathering, framed by spirituality and belief systems. There are also concerns that utilization of guns for hunting by indigenous peoples will affect conservation efforts, and indigenous peoples will lose knowledge of traditional methods.

4.2.5. Conflict

- A participant from the **Philippines** noted that a lack of understanding of how indigenous
 peoples practice sustainable use and wild species management brings values into conflict.
 In relation to conflicts between hunting and animal welfare groups, governments
 sometimes criminalise IPLC practices and portray them as harmful. This creates conflicts
 with other values and interests in society.
- A participant from Taiwan explained that in Taiwan there is concern about how to enhance engagement of IPLCs within the resource management regime. Conversations about sustainable use of wild animals receive resistance from animal protection groups, who think IPLCs should not hurt animals. Therefore, there is great debate about sustainable use of wildlife and animal rights.

4.2.6. Knowledge, language and education

- A participant from Canada explained that when communities lose land and water-based practices, and their relationship with lands and waters, that is when communities start losing their knowledge and language. This connection between practice, knowledge and language is fundamental to indigenous peoples around the world. They should not be seen as separate, as they can be in academia, where knowledge is often seen as separate from practice.
- Another participant from Canada noted that most indigenous languages come from the land, and without access to land and species, communities begin to lose language and who they are as people and as a nation.
- A participant from Nepal reported that for indigenous peoples, indigenous language is
 the foundation, but there are gaps now, particularly in education, which also breaks links
 between nature, culture and wild species. This may be why wild species and ILK are
 declining. There is however an opportunity to bridge this gap, with policymakers. Kirant
 indigenous peoples are only found in Nepal. They had 32 distinct dialects but now there
 are only about 26 remaining. Most of them are threatened or undermined by assimilation
 and non-recognition. They have a distinct vocabulary, and are mostly oral, with very deep

links with wild species, ecosystems, nature, Himalayas, snow, air, microbes, sacred lakes, waters, forests, lands, caves and animism. Many wild species are interlinked with Kirant indigenous peoples. They communicate or dialogue with such species in secret rituals and cultural performances during seasonal migrations and while maintaining traditional occupations. For IPLCs, sacred species in the wild link with ILK for customary sustainable use, domestication and conservation of habitats.

- A participant from Taiwan noted that knowledge is also encoded in language. This
 includes place names and stories behind place names, which are very relevant to the
 management of the landscape and how to sustain the system.
- A participant from **Thailand** highlighted that ILK is very much linked to ILK holders and elders, who transfer knowledge and teach young people. ILK is also linked to traditional institutions. These have been weakened by official governance and institutions. This is especially the case for knowledge transmission, which used to be very strong, but now there is no space due to the official education system. Traditional institutions need to be strengthened and there needs to be a plan at the policy level to support this process.

4.2.7. Commodification

- A participant from Canada explained that communities are being pressured to tap into their resources in an unsustainable way. Sometimes in Canada it seems that indigenous communities do not have any option but to commodify their resources, as this can be the only way that they can exercise their indigenous rights. This makes work on sustainable use very important. Fishing has been very controversial in the east coast of northern Turtle Island (North America). Communities are now trying to look into indigenous laws and protocols as a way forward.
- Another participant from Canada highlighted that the mainstream economy is the biggest threat to indigenous peoples' livelihoods and resources. Indigenous peoples have their own economies, based on the lands and waters. If they have plenty of salmon, game and berries, that is their grocery store and garden, and their economy. This is also a healthy economy. Elders tell of how in the past, people did not have nice clothes, but they had moose meat, wild salmon and wild potatoes, and communities had a lot of food to share. Today, people look nice with colourful clothes but often they do not have good food in their homes. Industrial machines are destroying the forests, and consequently the nature-based, balanced way of living is declining. To live in a healthy way the community needs to bring back that balance and concept of economy.
- A participant from Mexico noted that there are experiences of outside companies running hunting or ecotourism tours in mega-diverse countries or indigenous territories. In South America and Africa, this is an example of the non-fair distribution of benefits, which is unsustainable.
- A participant from the **Philippines** reported that because of socio-economic and ecological pressures, IPLCs in the Philippines also enter into commodification and that this is happening when customary governance has weakened.

A participant from **Thailand** explained that, on the subject of commodification and IPLCs, "tradition" and "innovation" can go together. It is possible to rearrange processes to make products for the market and income for the communities. For instance, indigenous peoples in northern Thailand have been practicing bee keeping in fallow land. The bees occur naturally, but they can be managed to increase their numbers and make honey for the market. Other non-timber forest products from community forests are also sold in the market. The elders say that if you manage the resources, forest and nature well, it will bring more products, and that this will be sustainable. With knowledge and skilled practices to manage and harvest forest products, the products will always increase rather than reduce. To get income from these products, it is important to communicate about the livelihood, traditional knowledge and practices to the people outside the communities. As a result, consumers in Thailand are increasingly interested in the communities' products, and the marketing is becoming quite successful. This shows that it is possible to have income and also use the food and products to communicate about community life and your knowledge, within a sustainable process. The COVID-19 pandemic has also encouraged a lot of community members to go back to traditional practices.

4.2.8. Wild and domestic species

- A participant from **Sweden** noted that for Saami, the reindeer are both wild and semi domesticated, and they are also dependent on wild species of plants.
- A participant from **Poland** shared the following observations:

Polish beekeepers are considering whether the honeybee, especially the Central European Honeybee, A. mellifera mellifera, could be considered a wild or fully domesticated species that could be used sustainably, and whether its promotion would lead to severe violation of the ecological balance. In Poland, the population of honeybees doubled in the last 12 years. Honeybees could however have negative impacts on other pollinators which are not so well known. In Poland and the neighbouring Central European countries, many activities are aimed at the restitution of tree-beekeeping (as described in a previous report for the IPBES values assessment). In an urbanised agricultural landscape, one cannot overestimate the benefits of preserving native bee fauna because they are the best adapted to pollinate native plant species, thus contributing to their maintenance at the area and their conservation. Despite that, the positive or negative effects of human activity will always need to be taken into account as, to a greater or lesser extent, they consciously modify the ecological balance that they want to maintain for the good of humanity and nature. Unfortunately, people also are not always aware of the negative impacts on the native bees of human-induced migration of plants and animals most often used in agriculture and beekeeping practices. There will always exist a conflict between farmers, treebeekeepers and commercial beekeepers' requirements, and the ecological needs of bees. Many beekeepers also know that they have already gone so far in the practice of breeding that a return to the original state of nature will never be possible.

In some instances, practices and beliefs can harm biodiversity. For instance, the belief that God is the creator of bees, or that bees are noble species while parasites are bad species, could harm the local diversity. Parasites are a base of the biosphere and form important interactions.

 A participant from the **Philippines** noted that domestication of wildlife could be important to consider within discussions of wild species. In the Philippines for instance, there are domesticated deer, which are caught in the wild and domesticated and then bred.

4.2.9. Indicators and monitoring

- A participant from Colombia explained that, regarding the lack of indicators that evaluate the use of wild and non-wild species and their cultural importance, in the Amazon there is experience with a method to register special indicators such as taboos and conditions of each species. This method is an attempt to record aspects of the cultural importance of a species, both to decrease and to increase its use, depending on the circumstances. The properties of the species can be medicinal or dietary. This could be useful in other contexts. A document on indicators of indigenous human wellbeing in the Colombian Amazon can be found here: https://sinchi.org.co/indicadores-de-bienestar-humano-indigena-ibhi
- A participant from Guatemala highlighted that indicators should not only be quantitative
 or statistical. Qualitative indicators are also important, and qualitative and quantitative
 indicators based on indigenous criteria should be established. They are also concrete and
 measurable, but they are often left out. A better balance could be found, which does not
 restrict monitoring only to technical indicators, without diminishing the importance of the
 quantitative.
- A participant from the **Philippines** highlighted that the assessment could consider community-based monitoring mechanisms to look at sustainable use of wildlife, as well as monitoring the impacts of policy. Community-based monitoring is very positive for community learning and governance, but it is also a good basis for IPLC interaction with statutory bodies. From the past strategy on biodiversity, monitoring has been a rather weak aspect of government reporting, and community-based monitoring was not fully taken into account.

4.3. Section C: What promotes the sustainable use of wild species?

After a brief presentation on Section C of the SPM, which explored the promotion of the sustainable use of wild species, the following examples and comments were also provided by IPLC participants, alongside the general comments provided above in Section 3.

4.3.1. Customary governance and institutions

- A participant from Argentina highlighted that sustainable use of wildlife is implicit and intrinsic to the customary law of indigenous peoples. For many indigenous peoples, it is customary law that guarantees sustainability. In general terms, what is sustainable has varied in different countries; in the case of some communities in Argentina, people only use what is necessary, what they need to eat, without destroying or over-exploiting. If they do not follow these rules, sanctions are applied so that customary law is respected. Customary use processes are well regulated and implemented in many villages.
- A participant from Finland explained that traditional governance systems, like ILK, are maintained in practice, and that if IPLCs are unable to practice their governance system, ILK will be lost and not passed on to the next generation. An example comes from the Sámi salmon river of Deatnu. Long ago, there were weirs, which were fences across the river. To fish sustainably using this method required close communication between various regions within the watershed, regarding when to keep the gates of the weir open. For example, it was important to know when enough salmon were in the different tributaries, to make sure that enough were left to spawn so the species would continue. This fishing method was later banned, yet it could be argued that it had been sustainable because the area had the most genetically diverse Atlantic salmon population in the world, which shows that none of the species were overfished. With state management, the close communication among traditional fishing regions was lost. New management strategies are mainly restrictions based on calendars and times, rather than on communication about the status of each river.
- A participant from the Philippines explained that there are communities in the Philippines
 with strong customary laws that cover not just a single species (e.g., rattan), but the whole
 watershed system. As a result, there are very minimal human interventions in the
 watershed system, so pollinators and other wildlife are protected by this customary
 governance.
- A participant from Uganda highlighted that culture is instrumental in ensuring sustainable
 use of wild species. In Karamoja, cultural festivals, including marriages and ceremonies,
 help the community, including the youth, to see and enjoy the benefits of wild species.
 During these social activities wild species are used as ornaments and instruments.

4.3.2. Management plans

• A participant from Australia explained that sustainable use in the Torres Strait is mainly related to turtle and dugong, which are threatened globally and in Australia. In the area, there are limited employment opportunities and little money, but the area is rich in natural resources and culture. In other areas of Australia there is a lot of development, mining, agriculture, etc., and habitat is being destroyed, and species suffer from that destruction. That is due to human population pressures and issues that come from "progress". Meanwhile, Torres Strait has one of the longest continuous seagrass meadows in the southern hemisphere, and lots of turtle and dugong in healthy numbers

and healthy conditions, which is attributed directly to the traditional way of life of the indigenous peoples, and very little impact from the outside world on how people live. However, with progress, more people are moving into the area. The communities recognise this, and recognise that turtle and dugong are a public good for all Australians and the global community. The communities have created Turtle and Dugong Management Plans, which outline guiding principles, purpose, roles and responsibilities and cultural protocols around dugong and turtle welfare. They also include statutory management arrangements. This is how the community is trying to look at sustainability: not just from a community point of view but also from a government and conservation point of view. Also, Australia is in the process of developing a "state of the environment" report, and Torres Strait will also develop its report to complement this. In the report, they have developed 16 key values, and these are being assessed, looking at condition, significance, conservation status, threat, trends and, importantly, confidence levels of data. Elders in communities will be part of determining that confidence level, giving them the same status as eminent scientists. This shows that in the Torres Strait the communities take the knowledge of their people very seriously, as they have lived there for many generations. The sustainable use assessment could also look at similar ways of working with confidence levels.

A participant from Canada highlighted that it can be important for indigenous peoples to develop and implement their own policies. For example, the Tsilhqot'in community carried out land use planning, well in advance of any kind of development. They consulted with their elders, looking at where they used to hunt, pick berries or do ceremonies. From this process they developed a land use plan for their land. They demarcated their land into a green zone (where development may be relatively acceptable), a yellow zone (where some modifications to a development may be needed, or more consultation is needed) and a red zone (where conflicts are likely to arise if development is initiated). As most people and companies want to avoid conflict, this has been quite effective at managing development. For example, the community learnt from their elders that traditional ancestors recognised one area as a 'no-go' zone from spring to mid-summer as it was a moose calving area – a swampy area where moose would go with their young calves to hide from predators. This was incorporated as a law in the community's land use plan – from early spring to mid-summer there is no logging or vehicle access, to give the animals space. There are also community mining policies and, importantly, water policies, recognising that clean water is essential for a clean, healthy environment. The plan is not government approved, but it holds weight as it is the community, as indigenous peoples, explaining their rules. If there are issues with developers that call for a negotiation with industry, and it goes to a courtroom, the community will be asked if they have policies or a land use plan in place. Such a document does not have to be long, but if it is from the heart of the community, and supported by the community, it can be very powerful. It is therefore important for indigenous peoples everywhere to start documenting this knowledge, especially as elders are passing away and taking their extensive knowledge with them. In a situation where legends and stories are often not being told anymore, a

community needs to find new creative ways to ensure knowledge is not lost. Putting knowledge and language into modern technology, for example phone applications, can also be very powerful.

4.3.3. Policy

- A participant from Canada noted that ILK is often not reflected in national policies and their respective national data and targets. For instance, indigenous peoples are often not involved in setting targets, yet they are expected to contribute to their implementation. For example, sometimes nationally agreed targets concerning climate and the environment are presented to indigenous communities and they are told they have to be met, but the communities were not involved in setting those targets. If policymakers and communities truly worked together it may be possible to set higher targets, as communities want their lands to be there for future generations.
- A participant from Kenya highlighted the need for a flow of information from IPLCs to the
 national level. A central challenge for IPLCs is that often ILK and its contributions to
 sustainable use and conservation initiatives are not acknowledged or recognised at the
 national level. The participant also noted the need to focus on customary rights, and the
 need to look at ways to strengthen them. It is also important to examine how to enhance
 ILK contributions to address policy gaps.
- A participant from the Philippines noted that consideration of ILK is very important for
 policymaking. For example, there can be conflicting laws about how to manage
 indigenous peoples' forests. This also includes the international level where plantations
 can be considered forests, which is very different from the natural forests of indigenous
 peoples. This impacts on indigenous peoples' rights, lands and management systems.

4.3.4. Access

- A participant from **Australia** highlighted that indigenous peoples cannot practice sustainable use of wild species without access to their traditional lands and seas.
- A participant from Costa Rica noted that a large number of ancestral areas that indigenous peoples use for current and sustainable use of resources are in national parks, but when they were established, indigenous peoples were not consulted. Today, after a long time and thanks to the Biodiversity Law, negotiations have been initiated for the restoration of the uses of resources, spaces for cultural or spiritual purposes and inputs for the economy of indigenous peoples. However, for many other areas there are no negotiations, even if these areas are strategic resources for the spirituality and life of the peoples.

4.3.5. ILK and science

 A participant from Bolivia noted that in principle the two types of knowledge, science and ILK, are on a level playing field. But in reality, ILK is always seen as something "raw" and not elaborated. Within this dialogue of knowledge, many scientists want ILK to be validated by science, when actually it is already validated from within ILK systems.

- A participant from Canada explained that it is challenging to effectively incorporate or "integrate" ILK into western science. There is a need to explore how to enhance knowledge co-production while maintaining the legitimacy of ILK. Indigenous peoples are often happy to share knowledge and stories if it is done in a respectful way, but there is often pressure to compromise who they are, and their ways of being and their relationships with the land. Scientists are often trying to fit ILK into their way of thinking. Instead, they need to see how IPLCs view the world, and set that alongside science. If science and ILK do not agree, that does not mean ILK should be set aside. Co-management could be better at conserving and promoting sustainable use of wild species than other forms of management, but this too can be very difficult, as indigenous peoples are often expected to follow outside models, and they ask themselves who they are conserving the resources for.
- A participant from **Finland** highlighted that while co-production of knowledge and comanagement are very important, there are good and bad examples of including ILK in
 research. If people who are not familiar with ILK as a knowledge system do this work, it
 can hinder the process. Sometimes, biologists are required to include ILK in their reports,
 but they end up undermining it as a knowledge system, and only pick some parts which
 fit their methods, often only using the parts that can be expressed in numbers. They
 therefore miss a big part of the knowledge. There is a tendency by some biologists to view
 science as superior to ILK and to try to validate ILK using scientific methods. As a way
 forward, only people familiar with ILK as a system should be involved in co-production
 and co-management to ensure that ILK is properly considered. Usually when people work
 on a subject, they are expected to have knowledge and training in it, but often this is not
 the case when people work with ILK. Biology based on western science is different in its
 production of knowledge. It seems reasonable to require that people working with ILK
 have knowledge of and respect for ILK systems. Good examples include co-management
 programmes set up with biologists and Saami working together.
- A participant from **Mexico** highlighted that indigenous groups have suffered for many years from the erosion of their knowledge. Care must therefore be taken with the methodologies and concepts currently used for the integration of knowledge. If this situation continues, it will continue to erode knowledge that is crucial for sustainability. It is important to evaluate the methodologies used to engage indigenous knowledge. For example, it can be said that knowledge needs to be co-produced, but if there is no scrutiny of how indigenous knowledge and indigenous peoples are engaged in these processes, it will continue to erode this knowledge that needs to be maintained. Inclusive processes have been given importance, but the benefits to communities are still not very clear. It is not clear how indigenous knowledge is understood, respected and above all maintained without trying to force its introduction into academic or scientific processes. In processes that attempt to co-produce or generate new knowledge, indigenous knowledge is often simply injected. The frameworks are often set by western/non-indigenous academics, so knowledge continues to erode because there is not yet an approach that sensitively respects indigenous ways of thinking. There have been success stories, but the scrutiny

should be done from an indigenous perspective, with a body of indigenous researchers analysing these methodologies. This is not to argue against the co-production of new knowledge, but against some of the tools used. Clearly co-production processes are happening now in contexts of inequality. The possible hybridisation of western science and indigenous knowledge to produce new knowledge is not meeting its potential if it does not lead to a new way of thinking about humanity, to a change in how nature is perceived, used and valued.

- Another participant from **Mexico** explained that it is necessary to co-produce knowledge, because there are realities to address, such as poverty in communities. The issue goes beyond producing new knowledge, to generating processes. In the issue of co-production, it is also necessary to consider cross-fertilisation or borrowing between knowledge systems, for example, around climate change. IPLCs cannot be isolated from the world. Traditional knowledge is not static either. There are many things that IPLCs have acquired "the hard way", such as plant varieties, which are already part of their lives. Also, there are already economic and social challenges that IPLCs have in the communities, and as communities they belong to countries or national systems. IPLCs have to work on how these national systems recognise IPLCS, and enable IPLCs to recognise their rights. IPLCs are also contributing to the welfare of the country through conservation, and wildlife management affects GDP. Therefore, IPLCs should not resist co-production, but instead they could aim to co-produce knowledge and co-produce processes, initiatives, and management plans, because they must always keep in mind that there are also external regulations and market issues that cannot be ignored. In this context, it is important to highlight the minimum conditions of co-production of knowledge, for example, it should be fair, equitable, efficient and successful. Working under standards of respect that make this co-production feasible is also important as often there is a lack of sensitivity towards how to work with indigenous knowledge, mocking IPLC rituals or not respecting IPLC timelines when doing research. Regarding validation, it is important to work with humility from modern science without devaluing ILK.
- A participant from **Nepal** noted that there are challenges in trying to co-produce ILK and science. The co-production could have both positive and negative impacts. ILK is broad and holistic while science is specific. It is very important to understand what IPLCs can lose in the integration/co-production process. Dialogue and participation of elders, women and youth would be essential. Elders are being lost in the pandemic, and with them much ILK is also lost. In this regard, ILK associated with wild species for sustainability is being lost, and there is a need to have mechanisms for its continuation. In Nepal, indigenous peoples have developed a National Plan of Action on Traditional Knowledge, in which ILK voluntarily interacts with science, policy, lobbying and capacity-building, for its protection and promotion.

4.3.6. Sharing and protecting knowledge

• A participant from **Argentina** noted that scientific knowledge is often protected by intellectual property rights, but for ILK that is not yet a given, partly because this

knowledge is developed collectively. Co-production is made more complicated because whenever it is done there is a high risk that ILK is not respected, as well as intellectual property rights being neglected.

- A participant from Costa Rica explained that ILK relates to spiritual matters, and also to early warnings on climate, food and health issues. There is increasing pressure for indigenous knowledge to be shared. However, in Costa Rica, a decree on the registration of all native seeds was stopped. A women's group filed an appeal for legal protection before the Constitutional Court, which succeeded in dissolving the decree. However, whether it is worth registering this knowledge or protecting it is always under discussion, but as long as there is no appropriate framework for protection it is better not to do so. It is better to be cautious in relation to the use of knowledge.
- A participant from Mexico explained that if customary law is not given a role (or "standing" or "status"), IPLCs will struggle to ask for more rights over the management of these species, such as territories and intellectual property rights. IPLCs should only publicly share knowledge that does not pose a risk to communities or peoples, within the framework of prior, informed consent. In the case of wildlife, data and knowledge (which is often the product of millennia or hundreds of years of observation and interaction) is extremely important in contributing to the management and recovery of species. One issue is how to find the balance between sharing and protecting.

4.4. Section D: What do we need to do? What are the pathways to sustainability?

After a brief presentation on Section D of the SPM, which explored pathways to sustainability, the following examples and comments were also provided by IPLC participants, alongside the general comments provided above in Section 3.

4.4.1. Overarching

 A participant from Ukraine noted that from the reports on the regional sessions given to the plenary of the ILK dialogue workshop it becomes clear that IPLCs all over the world have similar issues that should be highlighted in the assessment: recognition of customary rights, knowledge transmission issues, the loss of and lack of respect for rights.

4.4.2. Revitalisation of knowledge and culture

- A participant from Canada noted that there is a resurgence in Turtle Island (North America), and around the world, in terms of ways of knowing and identity, and values that guides communities.
- Another participant from **Canada** shared the following example:

In central Saskatchewan, Canada, on the northern edge of what used to be Great Plains of North America, the ancestors followed the plains bison, called buffaloes.

Buffaloes came to a point of extinction, and the community lost that way of life. There is much they have lost and much the community wants to revive: languages, cultures, wild species and relationships with nature. In Saskatchewan, referred to as the breadbasket of northern America, there is industrial agriculture that surrounds the community. Over generations, as people lost their connection to the plains bison, they also lost connection with land, water and sky. Today, like many communities in Canada, the community is trying to revive those ancestral relationships. To define themselves as indigenous peoples in the 21st century, they need "brother buffalo" beside them. Members of the community are looking to revive wildlife, plant species and relationships with spirits that surround them and provide for them. The community is aware that industrial agriculture is not sustainable, for they nearly lost the plains bison, and now the community is looking for ways to bring back the buffaloes to its territories.

The community are looking to do this through land-based programming through elementary and high schools. They feel it will be sustainable to work with young people and acknowledge that the revival is a gradual process and needs time. Therefore, organizations, institutions and governments need to give IPLCs time, as they are still adapting, but together they can learn how to adapt to these changes for future generations.

They are also sharing their lessons with external non-indigenous partners. A challenge is that the communities often lack resources and 21st century expertise and experiences to deal with some matters. To support this, they usually partner with NGOs and institutions.

• A participant from **Uganda** noted that continuing celebrations and ceremonies is also important to maintain links to wild species.

4.4.3. Recognition and support for customary governance

A participant from **Australia** recommended that in order to improve management of biodiversity and community access to resources, especially where conflicts over resources are likely to occur, indigenous peoples should be allowed to issue and control permits so that they can decide who gets to harvest what on their country, and they can base those decisions on their ILK. At the moment, in the Northern Territory, if indigenous peoples want to enter into any kind of commercial agreement around their own traditional bushfoods, they have to get a permit from National Parks to access the plants, and they have to prove that it would be sustainable based on scientific knowledge, rather than ILK. Yet they have been harvesting these plants at a sustainable rate for thousands of years. Indigenous peoples should therefore be able to increase their sovereignty over their resources. Combining scientific knowledge and ILK should not always be a goal, for sometimes there is a need to recognise that the best available knowledge is ILK, and that can be the basis of decision-making around access to resources. As a positive example,

the Blue Mud Bay court case⁶ in Australia related to the intertidal zone, and the High Court found in favour of the traditional owners and found that they had Native title rights over that area. Prior to that all permits went through the state, but following the case the permitting was controlled by indigenous peoples.

- A participant from Bolivia noted that in relation to the creation of public policies, it is
 interesting to see that within some communities, certain types of species management
 and conservation policies have been developed, for example self-governance in certain
 reserves in the United States, or in regions that are seeking processes of autonomy such
 as in Bolivia and Colombia. Although there are very few examples and there are many
 difficulties, as experiences and lessons they are extremely interesting.
- A participant from Canada noted that sustainable use of wild species is very important, as lack of sustainable management of resources affects life and health in IPLC villages and communities. Canada is a big country, yet there is one law on natural resources from the east to the west coast. However, this does not capture the diversity of ecosystems and the distinctiveness of indigenous communities. A successful law in one community could be unsuccessful in another community. It is important, therefore, to consider local contexts, values and cultures of the target community. Also, most of the laws are fragmented. To ensure sustainable management of natural resources, laws must incorporate indigenous views and knowledge of IPLCs as well as revival of customary laws. Indigenous laws and policies are usually successful.
- Another participant from Canada explained that his community sees a shared responsibility for land, water and sky but often policy, regulations, legislation and jurisdiction get in the way of a shared good future. His community is looking for ways to revive ancestral relationships with land, water and sky, and the first step is respect. There are communities on the Great Plains that followed the buffalo, and buffalo sustained them and defined who they were as plains people. Today they share the plains with many other people, but they can still maintain balance if they are all seated at the same table with equal status. At times there is a need to set aside jurisdiction, regulations, legislation and policy and work together for shared good futures. Indigenous peoples usually consider past and future to ensure sustainability. In ancestral times, individual action required consideration of the past (what the community has learnt, where the knowledge came from), to deal with present realities, and also consideration of future needs. Past, present and future was not compartmentalised it was all one consideration. Today there is often a hierarchy and compartmentalisation, and it can be important to set this aside to consider other ways of knowing and how to bring different ways of knowing together.

⁶ Blue Mud Bay case, summary from the High Court:

https://cdn.hcourt.gov.au/assets/publications/judgment-summaries/2008/hca29-2008-07-30.pdf

Full decision of the High Court related to the Blue Mud Bay case: http://www6.austlii.edu.au/cgibin/viewdoc/au/cases/cth/FCAFC/2007/23.html

- A participant from Finland highlighted that there is a need to ensure that all members of a community, including women, are included in decision-making processes, and capacity-building to support women's participation may be needed. This is the case for some Saami communities. In Finland, some governance practices are not functioning well, or at least not in a very organized way, and the way ILK is included is often to invite a few knowledge holders to be part of a working group or a board of directors. This is better than nothing, and these individuals bring their knowledge and connections to the community. There is, however, a need for capacity-building on traditional governance as it used to be, including village meetings where decisions were discussed and knowledge was developed. The inclusion of ILK would be much stronger with these mechanisms in place and capacity-building around them.
- A participant from Kenya recommended that the sustainable use assessment could highlight the need to strengthen traditional institutions. This includes the elders, including elder women, who are the knowledge holders, for this is where the governance lies. In many communities in Africa they are struggling to maintain community governance, and there is a need to strengthen these systems.
- A participant from Mexico shared that an effort towards co-production of knowledge for sustainable wildlife management has made progress in incorporating indicators such as governance and the empowerment of communities over their rights to territories. This is the "UMEROs", which come from the concept of UMAs (Sustainable Wildlife Management Units) foreseen in environmental law, which are a very strong movement in terms of wildlife management in Mexico. This process shows that communities care for the resources which they know are theirs, in the face of uncertainty. Many sensitivities have been explored relating to managing relationships and information. It is better understood how to work and to consider respect for the time needed for decision-making and knowledge sharing of local cultures. In co-production, the roles of each participant are established, and it is important not to create exaggerated expectations. Customary management is very relevant and timely, but it is necessary to establish whether it contributes to social and economic justice for IPLCs, or whom it benefits. Furthermore, it should be combined with external information such as market aspects, national or international regulations, trends, etc.
- A participant from Taiwan noted that in addition to community-based resource management, inter-community, or inter-regional and international cooperation is also needed to ensure connection of related IPLCs. For instance, indigenous peoples of Taiwan living in Oki Island and indigenous peoples in Ivatan Island in the Philippines speak the same language. They were divided by nation state boundaries. They used to travel across oceans and share fisheries resources. Pacific islanders are also largely connected to each other. For this reason, there is a need to build community networks in Asia-Pacific.
- A participant from Ukraine highlighted that it is very important that customary rights are acknowledged, as these are greatly supporting sustainable use of wild species in eastern Europe.

4.4.4. Participation

- A participant from Antigua and Barbuda noted that good governance is important to support conservation of wild species and their habitats. The challenge is that the knowledge of local people is not always taken into account in decision-making processes. For instance, sprays used to kill mosquitoes can also kill pollinators along the sides of the roads. Orders are often top down, and do not always suit local needs. Local communities are often aware when policymakers and practitioners are wrong. They will pass their thoughts on to trusted intermediaries, and they expect those comments to then be passed on to policymakers. They expect that their comments and views will be heard and heeded, but the local people themselves can seem to be silent. Bringing policymakers and local people together is therefore essential. When ministers are invited to meet the local communities, they can be fascinated by the knowledge of local communities. Partnership and intermediaries can be important and trust is essential as otherwise local people will remain quiet and not be visible. Policymakers also have to trust the intermediaries. Good governance with inclusive participation can help to holistically analyse the problem and solutions, but it takes time and effort to make local voices heard. Public awareness and education are also important to conserve biodiversity.
- A participant from Argentina highlighted that currently most legislation does not give a role to indigenous communities in wildlife management. It is important that participation is full and effective in decision-making processes, including through the creation of committees or advisory groups. The biggest problem is that IPLCs do not have full and effective participation at the governmental level in all aspects of species management. An important point of the Global Assessment of Biodiversity and Ecosystem Services of IPBES is that a large percentage of species, including those that are unique, are found on the lands and territories of indigenous peoples. It is therefore important to recognize the rights of indigenous peoples to their lands and territories to maintain species.
- A participant from Costa Rica explained that policy should be made through consultation, with full indigenous participation, and should include culturally appropriate targets and indicators.
- A participant from Grenada noted that more reflection is needed on the mechanisms and processes of effectively including ILK in policy, as it is not simple. Context, scale and size of country are very important. Island communities are very small, with short distances. So, for example, for governments wanting to implement a policy, intermediary organizations could be an effective avenue since they may have networks and are usually trusted by IPLCs. It is also important to ensure engagement, by making sure IPLCs attend relevant meetings, or taking the meetings to them. Timing is also important when engaging IPLCs, for example it can be better to engage them in late afternoon and not in the middle of the day, and where possible provide them with transport allowances. Different communication technologies can also be employed. Photo journals and participatory cell phone videos can also be used as a mechanism of ensure flow of information. IPLCs benefit from being in the room and participating in such processes, as

if they are there and their voice is heard, the person writing the policy will be obliged to include their thoughts.

• A participant from Mexico noted that policies should take into account the views and needs of IPLCs, but that often it is scientific bodies who provide policies on species use with information. If these bodies do not respect and recognise ILK as the basis and build from there, policies will not work. Often ILK is added to research projects, but is not recognised or credited as ILK. Sometimes ILK is even seen as supernatural or esoteric. There is a need to question who the actors are and who is speaking, publishing and making decisions in relation to ILK. Inequalities and limitations will prevail if the voices of IPLCs, who for centuries have been marginalized, are not distinguished and included.

4.4.5. Policymaking

- A participant from Colombia explained that there is an asymmetrical power relationship in the generation of knowledge relevant to indigenous peoples. The probability is therefore very low that the information that is generated will actually be accepted by the government bodies that determine public policy. The information is often not taken seriously, for ideological, technical or other reasons. Policy directed towards indigenous peoples remains unfocused on their reality. In the case of the Colombian Amazon, when information is produced that seeks to be accepted by all parties, it requires adaptation both institutionally and by indigenous organisations. The information should be directed to the design of public policies and to relevant organisations and institutions at all levels in order to effect change.
- A participant from **Uganda** noted that mapping of wild species in indigenous communities is very important, and is currently lacking. Threats also need to be mapped, as well as future use by future generations. IPLCs and their partners need to lobby for policies that protect sustainable use and use of wild species. There is misunderstanding and processes that undermine IPLCs using wild species, but in practice IPLCs often help to increase wild species. There is a need to call on friendly governments to make sure policies are in place to protect indigenous peoples and their wild species uses.

4.4.6. Links between international and national policy

• A participant from **Argentina** shared the following observations:

The summary for policymakers mentions article 8 (j) of the Convention on Biological Diversity (CBD), but article 10 (c) on customary use of biodiversity should also be mentioned. Traditional knowledge and customary sustainable use are interrelated and interdependent; if a community cannot use a plant that knowledge is lost. In addition, Article 10 (c) creates obligations on countries to "protect and encourage customary use of biological resources, in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements". It is also important to mention that human rights treaties are intrinsically related to culture and are binding. Several countries safeguard this right in terms of customary sustainable use of biodiversity.

The predominance of a conservationist policy has led to the loss of traditional knowledge and the sustainable use of resources. In reality, there are no public policies that promote customary sustainable use, which is an obligation of countries as stated in Article 10 (c) of the CBD, the Global Plan of Action on Sustainable Use.⁷ Aichi Target 18 of the Strategic Plan for Biodiversity 2011-2020, which is still in force, states that this Target has not been met, mainly with regard to customary sustainable use.⁸ Countries around the world do not have laws, policies and mechanisms for participation and it would be important to emphasize the use of this data to ensure that these approaches are promoted and advanced in establishing positive policy. There is a need to make visible and aggregate the elements of countries' obligations at the national level.

The fifth edition of the Global Biodiversity Outlook (GBO 5),⁹ concluded that targets have not been met (e.g., Aichi target 18). The data show that only a few countries have made progress. However, this is not detailed at country level, but in general terms.

- A participant from Mexico highlighted that the relevance of and need for indigenous
 wildlife management for conservation and diversification needs to be recognized, calling
 on national governments to implement international agreements on the rights of IPLCs
 to their natural riches. There is also a need to promote schemes that provide social and
 economic sustainability to IPLC wildlife management, as the fair and equitable payment
 for harvested products, recognizing the value of IPLC knowledge, and fair and equitable
 distribution of the benefits derived from the use of biodiversity.
- A participant from Mexico also noted that it would be important to review literature on the challenges and opportunities of access and benefit sharing (ABS) initiatives under the Nagoya Protocol for wildlife use, demand and management. Some records of access and how they have played out over time can be reviewed in the Nagoya Protocol's Clearing House. Rules based on the worldview, ethics or moral norms of communities could be added after management systems. Institutions are key.

4.4.7. Research

• A participant from Canada explained that it is important to get stories and direction from elders on laws in traditional areas. The community needs to also value its own thoughts and processes. Experts in other fields are often paid well for their knowledge and expertise, and the same should be true for ILK holders and elders. Much learning also needs to be done on the land, for example if researchers go fishing with the elders then the stories will start to be told naturally, and they will start to tell and show how to do things. If researchers want stories on berry picking, they need to go berry picking with the

⁷ https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-12-es.pdf, https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-12-en.pdf

⁸ https://www.cbd.int/doc/decisions/cop-10/cop-10-dec-02-en.pd

⁹ https://www.cbd.int/gbo5

elders and knowledge keepers, and they will start sharing how to do it properly. After this, that knowledge can be incorporated into a community's own governance structure. Some members of one community were worried about taking over governance of resources as they were afraid it would fail, but they were prepared to learn from possible failures, and they recognized that the national government system is also far from perfect and is often not protecting the environment. IPLCs need to get involved and put value on their own thoughts, because they are all guided by their ancestors. Efforts are also needed for revitalisation of ceremonies and other traditional activities. Twenty years ago, a community only had two songs, but now they have around 35 songs due to restoration efforts.

- Another participant from Canada explained that indigenous peoples need opportunities to share their stories, challenges and successes, at the local, regional and (in the case of Canada) provincial and federal level. The best partnerships have been borne of friendship, where sharing stories sparks the interest of non-indigenous communities, organizations and institutions. When they visit a community, they experience the community, life and the spirit, and the relationship changes. Therefore, once initial stories are shared, truly engaging is crucial. When organizations show genuine interest working with IPLCs, relationships gradually improve, and trust is built.
- A participant from Kenya highlighted that research is important, and indigenous youth, both young women and young men, should be included, so that researchers from outside can build their capacity, and so knowledge from research flows back to the community. Cultural and spiritual values are also very important. Indigenous women also have vital ILK on wild species that should be respected and documented. In Africa, many IPLCs have visions about desired future scenarios, but the vision is usually orally held, and as many governments do not respect ILK, many communities do not share their knowledge and visions as they are shy. There is a need to document and share ILK and the vision of IPLCs to feed into policies, and also because elders are passing away. However, the issue of intellectual property should be recognized. Documentation of ILK is slowly increasing, and, with FPIC, communities can begin to share their knowledge.
- A participant from **Uganda** shared the following observations:

Indigenous peoples have ILK, but the challenge is that it has not been recorded, or it has only been recorded a little by communities themselves, or by outsiders doing studies that are not really elaborate and do not really show realities on the ground. Thus, ILK is barely used in the formal conservation of wild species. However, the communities are ensuring that indigenous species are sustained on the ground.

ILK is also under threat. There is a need to try to quickly document and store ILK as soon as possible, to prevent its erosion in light of the dangers the system is facing, so that it is there for generations to come. Wild species are also under threat, and this heightens the need to document relevant ILK, as ILK could assist in sustainably managing wild species.

There is need to strengthen ILK systems particularly among communities, and to record ILK for future generations. There are limited studies on wild species and ILK. There is need to encourage mapping of wild species within indigenous territories. Research is also needed to understand how IPLCs can better protect wild species in the face of many threats, including climate change. There is also a need to explore sustainable harvesting, processing and marketing within IPLCs' territories. Karamoja has a wide range of wild species, and IPLCs can help to sustain them. There is a lot of ILK and if one knows how to work with this knowledge one can hear these stories.

Therefore, there is a need to build capacity to ensure ILK is documented, recorded and stored either in forms of writing, audio, videos or pictures, so this can be archived and used by future generations. Institutions need to take this need for documentation seriously. In the past, there was more reliance on outsiders, such as anthropologists, visiting communities to do research, but there is a great need for capacity-building so that communities can document their own knowledge. Capacity-building is needed for IPLCs and IPLC organizations, but it is challenging to get funding, with intense competition. There is therefore a need to have flexible funding requirements for IPLCs or to have tailored funding for IPLCs communities, so that they can do their own research. There is need to ensure the participation women and youth, particularly in maintaining the sustainability of wild species.

More efforts are also needed to ensure that documented ILK is fed into policymaking processes, so that it can inform policymakers. For instance, pastoralists have rich medicinal and veterinary knowledge for humans and animals, much of which concerns wild species. There is an opportunity to work with pastoralists to understand this knowledge to benefit the world. There is also a need to look at connections between protection from disasters, including the COVID-19 pandemic, and wild species.

- A participant from Nepal noted that the issue of intellectual property rights should be incorporated into ILK research, indigenous sciences, and commercialization of products. An effective mechanism needs to be developed in collaboration with indigenous peoples to ensure indigenous peoples' rights and that IPLCs benefit (and do not suffer) from commercialization of wild species. Effective participation of IPLCs and education can help secure benefits for IPLCs including IPLC women, elders and youth. Along with ILK, which is vitally important for culture, livelihoods and development, it is also vital for IPLCs to have industry, science and novel technological inventions. Science and policy must have clear mechanisms to ensure that account is taken of IPLCs and their ILK, with full and effective participation and FPIC. Socio-economic and cultural considerations must also be included in environmental impact assessments.
- A participant from the **Philippines** highlighted that there is a lack of support for IPLCs to
 engage in research and build their own research, for example the gaps on scenarios and
 models that are highlighted in the IPBES assessments. More time would be needed to
 craft a model using all of the different information that is shared, or dialogue workshops
 among IPLCs could be supported so that IPLCs can build their own models and reflect on

their own knowledge systems. For example, there was a series of workshops for indigenous peoples to build their own indicators, and now some indigenous groups are using those indicators in their own community-based monitoring.

A participant from Sweden made the following observations:

In 1917, the Brurskanken Saami Women's Association organized the first Sámi congress which brought more than 150 Sámi from across the Norwegian and Swedish border to discuss how to make a good living, education, and how to develop Sámi livelihoods in the face of colonial processes. This work has therefore been going on for a long time. However, even though Sámi can be seen as strong in comparison with many indigenous peoples around the world, they are not formulating policy, education or science. There are no universities that are led and directed by Sámi. (There is a Sámi University of Applied Sciences, on the Norwegian side, but it is under Norwegian law, and does not have PhD programs). On the Swedish side of Sámi territories there is currently only one professor who is openly Sámi, and working with Sámi related issues - language and culture. There are a few more on the Finnish and Norwegian side. However, in comparison with the US, Canada, Australia and Aotearoa-New Zealand, the Sámi territories are far behind. There are a few Sámi working with science and policymaking, but often Sámi are still excluded from the formulation of "what is science?" and what is good research. They are often still only involved in the short-term, contributing knowledge, but then a scholar or professor takes the knowledge and builds their own career on this knowledge. Also, then this knowledge often does not make its way into policymaking. This is a big problem as there is severe destruction of Sámi territories, by wind power and mines, which is destroying Sámi possibilities for livelihood. To divide scientists and indigenous peoples is a big problem. Indigenous peoples need support to be scholars at all levels to formulate science and research, and there should be support to institutionalize Sámi knowledge. Such universities would need to be free of state control. A lot of scientists do know these problems, but those who support Sámi are often pushed aside and are accused of being biased, while "good science" is something else.10

The field of indigenous studies, which has now existed for 50 years, and is strongly represented in North America, Australia and Aoteroa-New Zealand, should be supported in Europe too, to strengthen the presence of Sámi and other indigenous scholars producing knowledge and teaching at universities while connecting with their own communities in respectful ways, building on the worldviews in these communities. Also, there is a growing field of indigenous science and technology studies, in which indigenous people are scholars of science and technology, and are also doing social

Also relating to knowledge production: https://www.samelandsfriauniversitet.com/omabout.html.

¹⁰ A relevant link: Dálkke: Indigenous Climate Change Studies - in collaboration with Sámi community, scientists. https://cemfor.uu.se/Research/research-projects/dalkke--indigenous-climate-change-studies/.

studies of science and technology. This, too, should be supported. There is an indigenous science and technology studies research group in North America, led by Professor Kim TallBear, doing both social studies of science and technology, and training indigenous scientists. This is a very good way of supporting indigenous insights in science and technology.¹¹

There is a common thread in all groups of the ILK dialogue workshop – the demand for respect for indigenous knowledge and knowledge systems. While academia claims to be the platform for "objective" scientific knowledge production, anyone working in science and technology, or in humanities and social sciences within academia, knows that there are very strong power hierarchies – for how knowledge production is supported, what is published, which PhD students are recruited, which professors are appointed and what is considered the scientific "truth". This should be recognized, and indigenous knowledge production promoted within these power systems, as well as gaining access to the funding provided for knowledge production and research in science. Furthermore, there are indeed "western" scientists that are saying the same things as indigenous peoples do, stating that what is occurring right now is an ongoing destruction of water, climate, society and culture and mass extinction of wild species. It must also therefore also be recognized that science is not homogenous.

There are also alliances between indigenous peoples and non-indigenous peoples, including academic work, to challenge the destruction of lands, waters, habitat and homes, throughout history and today. Recent examples of these struggles and alliances are Idle No More in Canada, ¹³ Standing Rock ¹⁴ and the Tar Sands blockade ¹⁵ in the United States, the Alta protests in Norway in the 1970s and 80s, the Gállok/Kallak protests in Jokkmokk, Sweden since 2011, ¹⁶ and the recent "Forest Rebellion" (Skogsupproret) in Sweden starting in 2020.

¹¹ See: https://indigenoussts.com/research-team/. Professor TallBear can also be seen in several videos online talking on these issues, such as this one: https://www.youtube.com/watch?v=1-yVjSQ5ZPc. A useful chapter by Professor TallBear "Indigenous Bioscientists Constitute Knowledge across Cultures of Expertise and Tradition: An Indigenous Standpoint Research Project" available for download here: http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-383415.

¹² See Kuhn. 1962. the Structure of Scientific Revolutions, and also works by Donna Haraway, Sandra Harding, Evelyn Fox Keller, Kim TallBear and May-Britt Öhman.

¹³ Idle No More: http://www.idlenomore.ca

¹⁴ Standing Rock: Whyte. 2017a. The Dakota Access Pipeline, Environmental Injustice, and US Colonialism. RED INK 19 (1): 154-169; Whyte. 2017b. *Indigenous Climate Change Studies*. English Language Notes 55 (1-2): 153-162.

¹⁵ Tar Sands blockade: http://www.tarsandsblockade.org/.

¹⁶ Öhman. 2016. TechnoVisions of a Sámi cyborg. Ill-disciplined gender, Bull & Fahlgren (Eds), 63-98.

4.4.8. Education and capacity building

- A participant from Australia explained that Australia follows the Commonwealth Fisheries Act and that outside of three nautical miles from the coast the waters become controlled by the state, managed by the Australian Fisheries Authority and Department of Agriculture, out to the Exclusive Economic Zone. In 2018, communities were able to amend the act to include indigenous recreational fishers. The fisheries are managed through advisory committees, and fisheries are broken up into different fisheries and regions, e.g., southern bluefin tuna or western rock lobster. Indigenous representatives are expected to sit on these committees. However, it has been a challenge to find indigenous peoples with the experience and knowledge to participate. Capacity-building is needed for indigenous peoples so that they can learn about fisheries management regimes in Australia. They have the ILK, but they need additional training to understand how science, best practices, total allowable catches, etc., work in order to fully participate.
- A participant from the **Philippines** highlighted that education is very important. There could be stronger recommendations regarding intergenerational transfer of knowledge in relation to sustainable management of wildlife. Also, integration of indigenous languages and ILK into education system should be explored. In the Philippines there is an indigenous education section of the Department of Education. They see that it is important that such knowledge is incorporated in educational curricula. Western science has a strong propagation in many countries, especially in terms of education, but ILK is inadequately supported. There is need to explore how to mainstream ILK into education systems, to enhance intergenerational transfer of knowledge and also to improve public awareness of the importance of ILK.
- A participant from Taiwan noted that the link between ILK and education is very important. It is not just important to educate young indigenous people, it is also crucial to educate mainstream society about the value and importance of ILK. The academic community would also need to be indigenized, and change in the whole academic community is important. Universities should also work to acknowledge and respect ILK within a new knowledge paradigm.
- A participant from **Thailand** explained that transfer of ILK to young generations is very important. A mechanism needs to be developed to ensure that young people get a balanced education of ILK and science. This is a big challenge that needs to link to national policy. There is also a need to reflect on the link between languages, names of plants and animals, and biodiversity conservation. For instance, many young people do not know the names of wildlife in their indigenous language but only in the scientific or national language. They also do not have knowledge about these animals and plants, which tells how to conserve, protect and use them in a sustainable way. It is a major challenge for policymakers to think about this balance between ILK and science.

 A participant from **Ukraine** noted that often the IPLCs have knowledge, but often they are shy of sharing that knowledge. An important task is to increase their pride in their knowledge

4.4.9. Gender

- A participant from **Canada** noted that often SDG 5 on gender equity is left out of many activities, yet it is fundamentally important, and should be central to IPBES work.
- A participant from **Grenada** noted that it will be very important to discuss gender, and show how this has factored into research and the questions the assessment is asking.
- A participant from **Guatemala** highlighted that it is important to consider the knowledge of indigenous women in the sustainable management of species, which ranges from spiritual, medicinal, languages, etc., which is passed on from generation to generation.
- A participant from Ukraine highlighted that women are often not only users of wild species but also ILK holders. Often, they are not protected by any policies. There is a need to explore adaptation to new challenges, including how climate change and the COVID-19 pandemic have impacted and influenced the usage of wild species.

5. Next steps

The following next steps took place:

- Follow up calls and emails where needed for participants who did not have enough time
 to give their full interventions during the workshop or who could not connect well due to
 internet or technology problems.
- The sustainable use assessment authors and IPBES technical support unit on ILK drafted comments from the dialogue for the assessment's second external review. The comments were sent to all participants for their edits and additions. After some edits, and as there were no objections, the comments were submitted through the external review process on 24 June 2021 and were then formally addressed by assessment authors as they worked on the draft chapters and summary for policymakers.
- Participants were also invited to personally participate in the review period for the sustainable use assessment, which ran until 27 June 2021. Participants were invited to contact the IPBES technical support unit on ILK for any assistance.
- Sustainable use assessment authors and IPBES technical support unit on ILK also drafted a report from the dialogue workshop (this report), which was also sent to participants for review and comments. With participant consent, the report was made publicly available on the IPBES website.

Annexes

Annex 1: Agendas

Monda	ay, 17 May 2	ericas (in English) 021, 7pm to 10pm Central European Summer Time (Paris / Be Vancouver 10am, New York 1pm, Cuba 1pm, Halifax 2pm)	erlin / Madrid)	
Hour	Duration	Session	Speakers	
1 st hour	5 mins	Welcome	Sherry Pictou, Marla Emery	
	10 mins	Objectives of the workshop, FPIC	Marla Emery	
	5 mins	IPBES and ILK	Peter Bates, Marla Emery	
	15 mins	Introduction to the sustainable use assessment Overview of the draft key messages in the summary for	Marla Emery	
		policymakers (SPM)		
	10 mins	Section A of the SPM – presentation of ILK related Key Messages	Pua'ala Pascua, Marla Emery	
	15 mins	Comments and reflections about section A of the SPM	Participants	
2 nd hour	10 mins	Section B of the SPM – presentation of ILK related Key Messages	Renato Silvano, Tamara Ticktin	
	15 mins	Comments and reflections about section B of the SPM	Participants	
	10 mins	Break (10 mins)		
	10 mins	Section C of the SPM – presentation of ILK related Key Messages	Lisa Hiwasaki, Tamara Ticktin	
	15 mins	Discussion and reflections about section C of the SPM	Participants	
3 rd hour	10 mins	Section D of the SPM – presentation of ILK related Key Messages	Camila Islas, Tamara Ticktin	
	15 mins	Discussion and reflections about section D of the SPM	Participants	
	25 mins	Discussion: Overarching issues / Feedback on the workshop	Participants	
	5 mins	Next steps (follow up, report, review comments, future steps)	Peter Bates	
	5 mins	Closing	Tamara Ticktin Sherry Pictou	

Group session: Africa and Europe (in English and French) Tuesday, 18 May 2021, 1pm to 4pm Central European Summer Time (Paris / Berlin / Madrid) (Start: Senegal 11am, Ghana 11am, South Africa 1pm, Poland 1pm, Kenya 2pm, Moscow 2pm) Hour **Duration** Session **Speakers** 1st 5 mins Welcome Lucy Mulenkei, hour Marla Emery 10 mins Objectives of the workshop, FPIC Marla Emery 5 mins **IPBES** and ILK Peter Bates, Marla Emery 15 mins Introduction to the sustainable use assessment Marla Emery Overview of the draft key messages in the summary for policymakers (SPM) 10 mins Section A of the SPM – presentation of ILK related Key Isabel Diaz-Reviriego, Marla Messages **Emery** Comments and reflections about section A of the SPM 15 mins **Participants** 2nd 10 mins Esther Katz, Section B of the SPM – presentation of ILK related Key hour Messages Marla Emery 15 mins Comments and reflections about section B of the SPM **Participants** 10 mins Break (10 mins) Section C of the SPM – presentation of ILK related Key Kristina Raab, 10 mins Messages Marla Emery Discussion and reflections about section C of the SPM **Participants** 15 mins 3rd 10 mins Section D of the SPM – presentation of ILK related Key Shalini Dhyani, hour Messages Marla Emery 15 mins Discussion and reflections about section D of the SPM **Participants** 25 mins Discussion: Overarching issues / Feedback on the **Participants** workshop 5 mins Next steps (follow up, report, review comments, future Peter Bates steps) 5 mins Closing Marla Emery, Lucy Mulenkei

Group session: Latin America (in Spanish) Wednesday, 19 May 2021, 6pm to 9pm Central European Summer Time (Paris / Berlin / Madrid) (Start: Nicaragua 10am, Mexico 11am, Colombia 11am, Chile noon, Brazil 1pm, Argentina 1pm) Hour **Duration** Session **Speakers** 1st 5 mins Welcome Viviana Figueroa, hour Marla Emery 10 mins Objectives of the workshop, FPIC Marla Emery 5 mins **IPBES** and ILK Ana Maria Hernandez 15 mins Introduction to the sustainable use assessment Marla Emery Overview of the draft key messages in the summary for policymakers (SPM) Section A of the SPM – presentation of ILK related Key 10 mins Carlos Michaud, Messages Marla Emery 15 mins Comments and reflections about section A of the SPM **Participants** 2^{nd} 10 mins Section B of the SPM – presentation of ILK related Key Pablo Pacheco, hour Messages Marla Emery 15 mins Comments and reflections about section B of the SPM **Participants** 10 mins Break (10 mins) Section C of the SPM – presentation of ILK related Key Gabriel Lichtenstein, 10 mins Messages Marla Emery 15 mins Discussion and reflections about section C of the SPM **Participants** 3rd 10 mins Section D of the SPM – presentation of ILK related Key Paola Mosig Reidl, hour Messages Marla Emery 15 mins Discussion and reflections about section D of the SPM **Participants** Discussion: Overarching issues / Feedback on the 25 mins **Participants** workshop 5 mins Next steps (follow up, report, review comments, future Marla Emery steps) 5 mins Closing Marla Emery, Viviana Figueroa

Group session: Asia-Pacific and Oceania (in English) Thursday, 20 May 2021, 5am to 8am Central European Summer Time (Paris / Berlin / Madrid) (Start: India 8.30am, Philippines 11am, New Zealand 3pm, Fiji 3pm, Hawaii 5pm) **Duration** Hour Session **Speakers** 1st 5 mins Welcome Florence Daguitan, hour Marla Emery 10 mins Objectives of the workshop, FPIC Marla Emery 5 mins **IPBES** and ILK Peter Bates, Marla Emery 15 mins Introduction to the sustainable use assessment Marla Emery Overview of the draft key messages in the summary for policymakers (SPM) 10 mins Section A of the SPM – presentation of ILK related Key Pua'ala Pascua, Tamara Tickin Messages 15 mins Comments and reflections about section A of the SPM **Participants** 2nd 10 mins Section B of the SPM – presentation of ILK related Key Esther Katz, Tamara Tickin hour Messages Comments and reflections about section B of the SPM 15 mins **Participants** 10 mins Break (10 mins) Section C of the SPM – presentation of ILK related Key Uttam Babu Shrestha, 10 mins Tamara Tickin Messages 15 mins Discussion and reflections about section C of the SPM **Participants** 3rd 10 mins Section D of the SPM – presentation of ILK related Key Shalini Dhyani, hour Tamara Tickin Messages 15 mins Discussion and reflections about section D of the SPM **Participants** 25 mins Discussion: Overarching issues / Feedback on the **Participants** workshop 5 mins Next steps (follow up, report, review comments, future Peter Bates steps) 5 mins Closing Pua'ala Pascua, Tamara Ticktin,

Florence Daguitan

<u>Plenary</u>	session (in E	English and Spanish with interpretation)			
Friday, 21 May 2021, 2pm to 4pm Central European Summer Time (Paris / Berlin / Madrid)					
(Start: N	lexico 7am,	New York 8am, Ghana noon, Philippines 8pm)			
Hour	Duration	Session	Speakers		
1st hour	10 mins	Welcome and aims of session	Kamal Kumar Rai, Ana María Hernandez, Marla Emery		
	50 mins	Reports of the discussions in the different regional sessions	Viviana Figueroa, Florence Daguitan, Lucy Mulenkei, Sherry Pictou		
2 [™] hour	30 mins	Discussion: Overarching issues, key messages	All participants		
	10 mins	Feedback on the workshop	All participants		
	10 mins	Next steps (follow up, report, review comments, future steps)	Marla Emery, Peter Bates		
	10 mins	Closing	Ana María Hernandez, Marla Emery		

Annex 2: FPIC document

Free Prior Informed Consent (FPIC) principles for sharing of knowledge during the indigenous and local knowledge dialogue workshop for the IPBES assessment of the sustainable use of wild species

Online, 17-21 May 2021

The individuals whose names are listed at the end of this document agreed during the dialogue workshop to follow the principles and steps laid out in this document.

Background

Within the framework of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), principles of Free Prior Informed Consent (FPIC) apply to research or knowledge-related interactions between indigenous peoples and outsiders (including researchers, scientists, journalists, etc.). Given that the dialogue process includes discussion of indigenous knowledge of biodiversity and ecosystems, there may be information which the knowledge holders or their organizations or respective communities consider sensitive, private, or holding value for themselves which they do not want to share in the public domain through publications or other media without formal consent.

Objectives of the workshop

For IPBES, the objective of the workshop is to learn from participants about their knowledge of sustainable use of wild species. The aim is to gather a series of recommendations for the draft of the assessment, which will be entered into the assessment's review process and used to inform its further development. If participants agree, a report may also be developed to serve as a record of the discussions. Other results may include case studies that illustrate assessment themes.

It is hoped that the workshop will provide an opportunity for all participants to learn more about IPBES and the assessment, and to reflect and learn from one another about how indigenous and local knowledge can inform and influence environmental decision-making.

Principles

The dialogue will be built on equal sharing and joint learning across knowledge systems and cultures. The aim is to create an environment where people feel comfortable and able to speak on equal terms, which is an important precondition for true dialogue.

To achieve these aims, the following goals are emphasized:

- Equality of all participants and absence of coercive influence
- Listening with empathy and seeking to understand each other's viewpoints
- Accurate and empathetic communication
- Bringing assumptions into the open

If participants feel that the above goals are not being achieved at any point during IPBES activities, participants are asked to bring this to the attention of the organizers of the activity, or the IPBES technical support unit on ILK, at: ilk.tsu.ipbes@unesco.org.

Sharing knowledge and respecting FPIC

To ensure that knowledge is shared in appropriate ways during dialogue workshops and other IPBES activities, and that information and materials produced after these activities are used in ways that respect FPIC, we propose the following:

1. Guardianship – participants who represent organizations and communities

- Principles of guardianship will be discussed with IPLC participants at the beginning of IPBES activities.
- Participants who represent organizations or communities will act as the guardians of the use of the knowledge and materials from their respective organizations or communities that is shared before, during or after the workshop. Any use of their organizations' or communities' knowledge will be discussed and approved by the guardians, as legitimate representatives of their organizations or communities. Guardians are expected to contact their respective organizations and communities when they need advice. Guardians are also expected to seek consent from their organizations or communities when they consider that this is required, keeping in mind that sharing details of their community's knowledge can potentially have negative consequences, for example sharing the locations and uses of medicinal plants.

2. FPIC rights during dialogue workshops and other activities

- The FPIC rights of the indigenous peoples participating in dialogue workshops or other activities will be discussed prior to the beginning of the activity, until participants feel comfortable and well informed about their rights and the process, including the eventual planned use and distribution of information. This discussion may be revisited during the activity, and will be revisited at the end of dialogue workshops once participants have engaged in the dialogue process.
- Participants do not have to answer any questions that they do not want to answer, and do not need to participate in any part of an activity in which they do not wish to participate;
- At any point, any participant can decide that they do not want particular information to be documented or shared outside of the activity. Participants will inform organizers and other participants of this. Organizers and participants will ensure that the information is not recorded. Participants can also request that the information is only recorded as a general statement attributed to a region or country, rather than to a specific community.
- Permission for photographs must be agreed prior to photos being taken and participants have the right not to be photographed. Organizers will take note of this.

3. After the activity

- Permission will be obtained before any photograph of a participant is used or distributed in any form.
- Permission will be obtained before any list of participants is used or distributed in any form.

- Participants maintain intellectual property rights over all information collected from them about themselves or their communities, including photographs. Their intellectual property rights should be protected, pursuant to applicable laws.
- Copies of all information collected will be provided to the participants for approval.
- Any materials developed for IPBES assessments or other products using information provided by participants will be shared with the participants for prior approval and consent.
- The information collected during the activity will not be used for any purposes other than those for which consent has been granted, unless permission is sought and given by participants.
- Participants can decline to consent or withdraw their knowledge or information from the process at any time, and records of that information will be deleted if requested by the participant. Participants should however be aware that once an assessment is published it cannot be changed, and information incorporated into the assessment cannot therefore be withdrawn from the assessment after this point.
- Participants should have the opportunity of reviewing and commenting upon the final product, bearing in mind that responsibility for the final product rests exclusively with the authors.

The participants of the workshop, listed below in Annex 3, agreed to follow the principles and steps laid out in this FPIC document.

Annex 3: Participants of the dialogue workshop

Africa and Europe			
Aliou Bouba	Cameroon	Mbororo, IPGFforSD, MBOSCUDA and ADJEMA	
Hawe Hamman Bouba	Cameroon	Executive Director of African Indigenous Women Organisation - Central African Network (AIWO-CAN)	
Mulubrhan Balehegn Gebremikael	Ethiopia	Institute of Food and Agricultural Sciences, University of Florida	
Przemyslaw Grodzicki	Poland	Bee-keeper, Founding member of the Forest Path Organization, Professor at the University of Nicholaus Copernicus in Torun, Poland	
Aslak Holmberg	Finland	Vice President, Saami Council	
Hindou Ibrahim	Chad	Association of Peul Women and Autochthonous Peoples of Chad	
Basiru Isa	Cameroon	Regional Director of the Network of Indigenous People and local population for the sustainable management of forest and ecosystem services (REPALEAC in French)	
Jakub Jaroński	Poland	Bee-keeper and a community-based bee activist	
Edna Kaptoyo	Kenya	Pastoral Communities Empowerment Programme (PACEP)	
Witness Kozanayi	Zimbabwe	University of Cape Town	
Elifuraha Laltaika	Tanzania	Association for Law and Advocacy for Pastoralists (ALAPA), Tumaini University Makumira, Tanzania	
Hannah Longole	Uganda	Executive director of Ateker Cultural Center	
Marta Moulis	Poland	Bee-keeper, Forest Path Organization	
Gathuru Mburu	Kenya	Institute of Culture and Ecology, Kenya	
Venant Messe	Cameroon	Director of OKANI (Baka organisation) and Forest Peoples Programme (FPP) coordinator.	
Simon Mitambo	Kenya	Africa Biodiversity Network, Kenya	
Lucy Mulenkei	Kenya	Co-Chair, International Indigenous Forum on Biodiversity (IIFB)	
May-Britt Öhman	Sweden	Centre for Multidisciplinary Studies on Racism, Uppsala University	
Andrzej Pazura	Poland	Traditional honey harvester and teacher, Forest Path Organization	
Piotr Pazura	Poland	Bee-keeper, Forest Path Organization	
Katarzyna Piątkowska	Poland	Bee-keeper, Founding member of the Forest Path Organization, Professor at the University of Nicholaus Copernicus in Torun, Poland	
Piotr Piłasiewicz	Poland	Bee-keeper, Forest Path Organization	
Loupa Pius	Uganda	Projects Coordinator en Dynamic Agro-pastoralist Development Organisation (DADO)	
John Samorai Lengoisa	Kenya	Ogiek Peoples' Development Program (OPDP)	
Gakemotho Satau	Botswana	TOCaDI (Trust for Okavango Cultural and Development Initiative)	
Kanyinke Sena	Kenya	Indigenous Peoples of Africa Coordinating Committee (IPACC), IPBES task force on ILK	
Severin Sindizera	Burundi	Coordinator of Association for Integration and Sustainable Development in Burundi (AIDB)	
Renata Soukand	Estonia	Department of Environmental Sciences, Informatics and Statistics, Università Ca' Foscari Venezia	
Nataliya Stryamets	Ukraine	Ca' Foscari University of Venice	
Rodion Sulyandziga	Russia	Director, Centre for the Support of Indigenous Peoples of the North	

Americas (English)			
Kelvin Alie	Dominica	Conservation International	
Chief Joe Alphonse	Canada	Tribal Chairman of the Tsilhqot'in National Government	
Natalie Boodram	Trinidad and Tobago	CANARI Programme Manager, Senior Technical Officer	
Anthony Blair Dreaver Johnston	Canada	Special Projects worker for Mistawasis Nêhiyawak	
Darrell Hillaire	USA Lummi elder		
Lynn Jacobs Canada		Director of Environment Protection, Mohawk Council of Kahnawà:ke	
Barbara Japal	Antigua	Antigua Barbuda Horticultural Society	
Melonee Montano USA		Traditional Ecological Knowledge Outreach Specialist, Great Lakes Indian Fish & Wildlife Commission	
Sherry Pictou	Canada	Schulich School of Law, Dalhousie University / IPBES ILK task force	
Kyle Powys Whyte	USA	Michigan State University (MSU)	
Kurt Russo	USA	Executive Director of the indigenous-led nonprofit Se'Se'Le	
Ruth Spencer Antigua		Coordinator - Training, outreach and resource mobilization of the Freetown Community Group/Caribbean Marine Managed Areas Network	

Asia-Pacific				
Jocelyn (Joji) Carino Philippines		Forest Peoples Programme / Centres of Distinction on Indigenous and Local Knowledge / IPBES ILK task force		
Florence Daguitan	Philippines	Tebtebba, Philippines		
Anoop Kani	India	Kerala Kani Community Welfare Trust		
Jimmy Kereseka	Solomon Islands	Environment Officer, Lauru Land Conference of Tribal Community (LLCTC)		
Daya Dakasi Da-Wei Kuan	Taiwan	Associate Professor, Department of Ethnology at National Cheng Chi University (NCCU)		
Kamal Kumar Rai	Nepal	Society for Wetland Biodiversity Conservation / IPBES ILK task force		
Stan Lui	Australia	Manager of the Torres Strait Regional Authorities, Land and Sea Management Unit		
Yin Lun	China	Professor in the Center for Ecological Civilization, Southwest Forestry University		
Thingreiphi Lungharwo	India	Naga Peoples Movement for Human Rights (NPMHR)		
Tame Malcolm Aotearoa - New Zealand Te Tira Whakamataki (Maori Biosec		Te Tira Whakamataki (Maori Biosecurity Network)		
Lakpa Nuri Sherpa	Nepal	Asia Indigenous Peoples Pact		
Margaret Raven	Australia	University of New South Wales, Australia		
Maria Elena Regpala	Philippines	Partners for Indigenous Knowledge Philippines		
Polina Shulbaeva	Russia	Centre for Support of Indigenous Peoples of the North (CSIPN)		
Alifereti Tawake	Fiji	Locally Managed Marine Protected Areas Network		
Prasert Trakansuphakon	Thailand	Pgakenyau Association for Sustainable Development (PASD)		
Joeli Veitayaki	Fiji	Associate Professor, School of Marine Studies, University of the South Pacific		

Latin America (Spanish)				
Ramiro Batzin	Guatemala	Co-chair, International Indigenous Forum on Biodiversity		
Lola Cabnal	Guatemala	Ak'Tenamit Association		
Q"apaj Conde	Bolivia	Convention on Bilogical Diversity		
Jósimo da Costa Constant	Brasil	Anthropologist		
Franklin Da Silva	Brazil	PhD student in anthropology, Universidade de Brasilia		
Pablo De La Cruz	Colombia	Researcher, Instituto Amazónico de Investigaciones Científicas Sinchi		
Viviana Figueroa	Argentina	Indigenous Women Network on Biodiversity / IPBES ILK task force		
Guadalupe Yesenia Hernández Márquez	Mexico	ILK focal point for IPBES in Mexico		
Yolanda López- Maldonado	Mexico	Geographer, IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas		
Jesús Amadeo Martínez Guzmán	El Salvador	Consejero Mayor del Consejo Indígena de Centro América CICA		
Osvaldo Munguia	Honduras	Agency for the Development of the Honduran Mosquitia (MOPAWI)		
Rene Paca Pacolla	Bolivia	Presidentes ACOFIVB		
Cesar Rojas	Peru	Mesa Tecnica de Camelidos Sudamericanos Región Ayacucho		
Donald Rojas Maroto	Costa Rica	President of the National Indigenous Bureau, Costa Rica		
Juliana Yeshing Upun	Guatemala	Sotz'il Association		

The IPBES sustainable use assessment			
Marla Emery	USA	Co-chair of the sustainable use assessment	
Carlos Enrique Michaud Lopez	Peru	Chapter 1	
Pua'ala Pascua	USA - Hawai'i	Chapter 2	
Isabel Diaz-Reviriego	Spain	Chapter 2	
Tamara Ticktin	USA - Hawai'i	Chapter 2	
Ram Prasad Chaudhary	Nepal	Chapter 3	
Esther Katz	France	Chapter 3	
Renato Silvano	Brazil	Chapter 3	
Shiva Devkota	Nepal	Chapter 4	
Janaina Diniz	Brazil	Chapter 4	
Lisa Hiwasaki	Japan	Chapter 4	
Gabriela Lichtenstein	Argentina	Chapter 4	
Marie-Christine Cormier-Salem	France	Chapter 4	
Uttam Babu Shrestha	Nepal	Chapter 4	
Denise Margaret Matias	Philippines	Chapter 5	
Camila Alvez Islas	Brazil	Chapter 6	
Shalini Dhyani	India	Chapter 6	
Kristina Raab	Germany	Chapter 6	
Marie-Claire Danner	France	Technical support unit for the sustainable use assessment	
Daniel Kieling	Brazil	Technical support unit for the sustainable use assessment	

IPBES			
Ana María Hernández	Colombia	IPBES Chair / Co-chair of the IPBES task force on ILK	
Adriana Flores Mexico		Co-chair of the IPBES task force on ILK	
Peter Bates	United Kingdom	IPBES technical support unit on indigenous and local knowledge	
Nigel Crawhall	South Africa	IPBES technical support unit on indigenous and local knowledge	
Joseph Karanja	Kenya	IPBES technical support unit on indigenous and local knowledge	