

**Report**

**First indigenous and local knowledge  
dialogue workshop**

**for the**

**IPBES assessments of the nexus of  
biodiversity, food, water and health and  
transformative change**

**Framing the assessments**

29 June to 1 July 2022, Bonn, Germany



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**Disclaimer:** The text in sections 3, 4 and 5 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.

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# 1. Introduction

This is the report of the of the first indigenous and local knowledge (ILK) dialogue workshop for two new IPBES assessments:

- [the nexus of biodiversity, food water and health](#)
- [transformative change](#)

This first dialogue was a platform for indigenous peoples and local communities (IPLCs) to discuss with the assessment authors about the framing, conceptualizations, potential themes, key questions, challenges, resources and other issues related to the two new assessments.

This report aims to provide a written record of the dialogue workshop, which can be used by assessment authors to inform their work on the assessments, and also by all dialogue participants who may wish to review and contribute to the work of the assessments 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 over the coming months and years. For this reason, clear points of agreement are discussed, but also, if there were diverging views among participants, these are also presented for further attention and discussion.

The text in sections 3, 4 and 5 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.

## 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*. The IPBES rolling work programme up to 2030 includes 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 [task force on indigenous and local knowledge systems](#) and agreed on [terms of reference](#) guiding its operations towards implementing this deliverable. IPBES' work with IPLCs and on ILK is 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 (Pollination, Pollinators and Food Production, Land Degradation and Restoration, four Regional Assessments and a Global Assessment of Biodiversity and Ecosystem Services, Sustainable Use of Wild Species, and Values of Nature);
- 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 in decision IPBES-5/1, 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 within the IPBES context;
- Development and implementation of a “[participatory mechanism](#)”, a series of activities and pathways to facilitate the participation of IPLCs in IPBES assessments and other activities; and
- Organizing [ILK dialogue workshops](#) for the IPBES assessments.

## **2.2. The IPBES nexus assessment**

The nexus assessment runs from 2021 to 2024, and has about 165 authors from around the world. It will consist of seven chapters and a summary for policymakers (SPM). The chapters are as follows:

- Chapter 1: Introducing the nexus
- Chapter 2: Status and past trends of interactions in the nexus
- Chapter 3: Future interactions across the nexus
- Chapter 4: Policy and sociopolitical options across the nexus
- Chapter 5: Options for delivering sustainable approaches
- Chapter 6: Options for public and private finance
- Chapter 7: Synthesis of options, knowledge and technology gaps

The assessment addresses the interlinkages among biodiversity, food, water and health, with attention also to climate change and relevant aspects of the energy system, and will consider holistic approaches based on different knowledge systems.

It will assess the state of knowledge, including ILK, on past, present and possible future trends in these multi-scale interlinkages to inform the development of policies and actions.

The assessment will consider the synergies and trade-offs in terms of broadly defined social, economic, and environmental impacts. Emphasis will be placed on response options that consider these nexus elements and their diverse dimensions, including the limits and safeguards needed to implement those options.

The assessment will also evaluate the role of the most important drivers of change, including societal values, production and consumption patterns, demography, technology, culture, governance, land- and sea-use change, direct exploitation of nature, climate change, pollution, and invasive species.

More can be read about the nexus assessment, including its scoping report, here: <https://ipbes.net/nexus>.

## **2.3. The IPBES transformative change assessment**

The transformative change assessment runs from 2021 to 2024, and has about 100 authors from around the world. It will consist of 5 chapters and an SPM. The chapters are as follows:

- Chapter 1: Transformative change and a sustainable world
- Chapter 2: Visions of a sustainable world - for nature and people
- Chapter 3: How transformative change occurs
- Chapter 4: Overcoming the challenges of achieving transformative change

- Chapter 5: Realizing a sustainable world for nature and people: transformative strategies, actions and roles for all

“Transformative change” was defined by the IPBES Global Assessment of Biodiversity and Ecosystem Services (2019) as “a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values, needed for the conservation and sustainable use of biodiversity, long-term human wellbeing and sustainable development”.

The IPBES Global Assessment (2019) concluded that the pathways for achieving the 2050 Vision for Biodiversity require fundamental changes in development and social-ecological dynamics, which in turn entail changes in society, considering inequality and governance, employing conservation, restoration and the sustainable use of land, water, energy and materials, and rethinking and appropriately modifying production and consumption habits, food systems, and global value chains. The assessment will inform decision-makers on options to implement transformative change.

The assessment report will assess and compare different visions, scenarios, and pathways for a sustainable world, including visions of IPLCs. Further, the report will assess the determinants of transformative change, how it occurs, and which obstacles it may face.

Finally, and importantly, the report will assess which practical options for concrete action exist to foster, accelerate and maintain transformative change toward visions of a sustainable world, which practical steps are required to achieve these visions, and how progress towards transformative change can be identified and tracked.

More can be read about the transformative change assessment, including its scoping report, here: <https://ipbes.net/transformative-change>.

## **2.4. Context for the dialogue workshop**

IPBES recognizes that ILK holds important insights into both the nexus of biodiversity, food, water and health, and transformative change, and that participation of IPLCs is crucial to both assessments. Following the IPBES approach to ILK, three dialogue workshops will be held during the assessment cycle. These bring together IPLCs and authors of the assessments to discuss key themes relating to the assessments. The first workshop, which is the subject of this report, discusses the conceptualisation of the assessment and approaches that will be used.

The dialogue workshops are part of a series of complementary activities for working with IPLCs and ILK throughout the assessment process, in the context of the implementation of the approach (see figure 1).



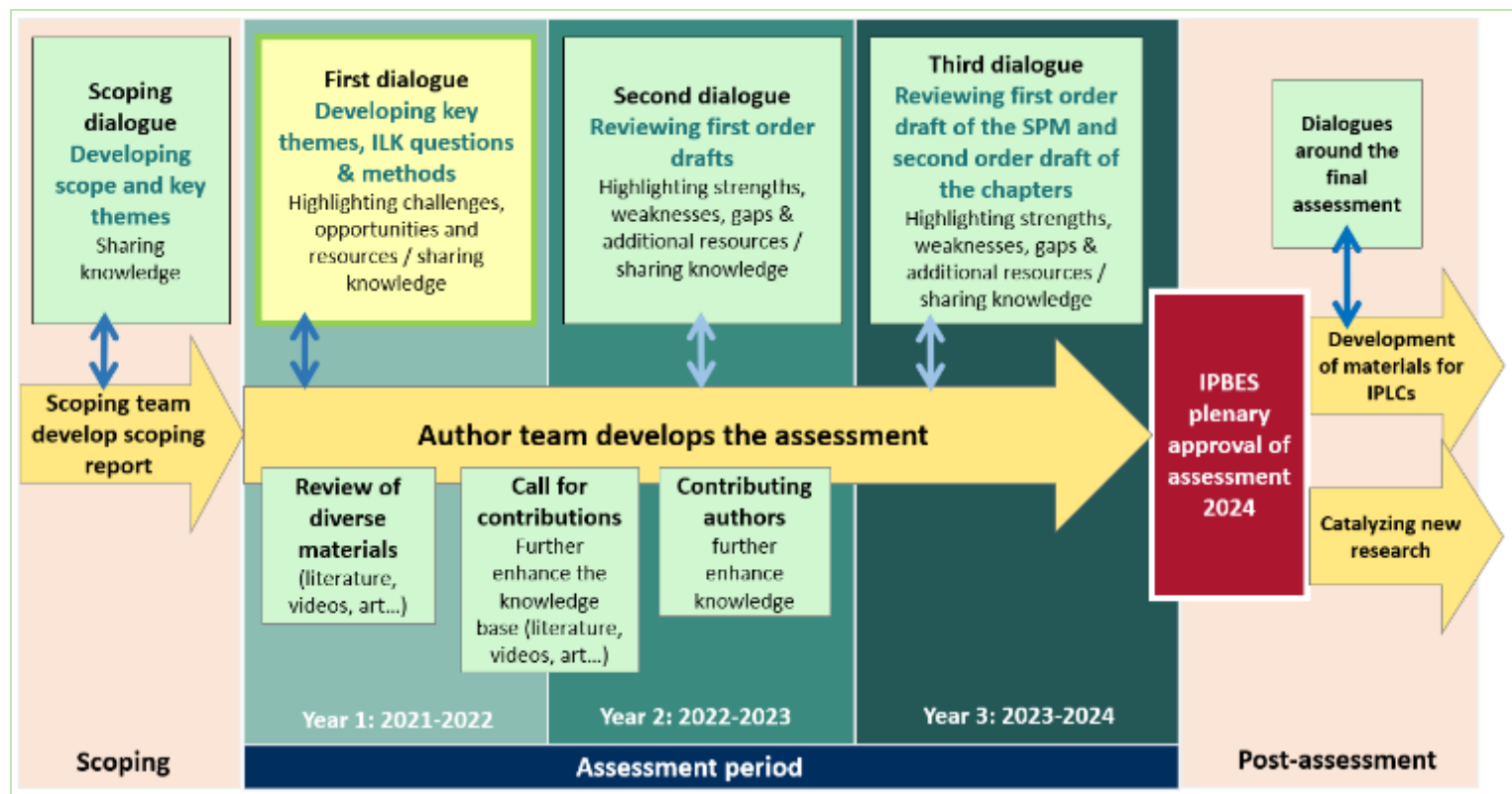


Figure 1: Timeline of work with ILK in IPBES assessments, following the IPBES approach to ILK.

## 2.5. Objectives of the ILK dialogue workshop

The objectives of the ILK dialogue workshop were as follows:

- Developing recommendations from IPLCs for specific topics and areas of foci for the assessments;
- Developing a series of key ILK questions and themes, which will help shape narratives for the assessments and direct the collection, analysis and synthesis of information;
- Exploring how IPLCs conceptualize, experience, understand and manage the nexus of biodiversity, food, water and health;
- Exploring how IPLCs conceptualize transformative change, their visions for the future, and pathways and challenges for achieving these visions;
- Beginning to develop case studies of relevance to the assessments;
- Determining key experts who can contribute to the assessments as contributing authors or participants in future dialogue workshops and review processes; and
- Identifying resources and sources of information that could be included in the assessments.

## **2.6. Benefits to IPLCs of participating in the assessments**

During previous workshops, participants noted that if IPLCs are to participate in an 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;
- The opportunity for IPLCs to share and exchange experience and knowledge with IPBES authors;
- Use of the final assessments as a tool when IPLCs are working with policymakers, decision-makers and scientists, noting that part of the planning for the final assessment includes the development of an accessible summary for IPLCs; and
- The opportunity to bring ILK and IPLC concerns to the attention of policymakers and decision-makers.

## **2.7. FPIC**

Free, prior and informed consent (FPIC) 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 participants from IPLCs, assessment authors and the IPBES secretariat. 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 for the assessments<sup>1</sup>**

Participants made a number of overarching recommendations of relevance to both assessments.

#### **3.1. Weaving knowledge and IPLC participation**

Participants noted that the assessments are an opportunity to demonstrate equality of knowledge systems, with respect, attention and credit given to ILK in the text, and attention and space given to IPLC conceptualizations of assessment themes. Within this, they noted that ILK does not need to be validated by scientific knowledge and can be recognized on its own terms, since often there is no direct extrapolation between ILK and scientific categories or conceptualizations.

Participants highlighted that it will be important to engage with IPLCs as closely as possible, including women and youth, both as authors and contributing authors and as workshop participants. Engaging with indigenous methodologies and scholarship will also be highly beneficial. It was also highlighted that journal articles, reports, videos or other materials authored by IPLCs should be a priority for consideration in the assessments. Efforts to work across multiple languages will be appreciated and of great benefit to assessments.

Following processes for FPIC will be key when working with ILK in the assessments.<sup>2</sup> Giving proper credit to IPLCs within the assessment text will also be important. For example, rather than crediting only the author of a journal article, the communities or individuals whose knowledge is documented in the article could be recognized and credited.

Considering opportunities for capacity-building of IPLCs during the assessment cycles would be important.

#### **3.2. Representations of IPLCs and ILK in the assessments**

Noting that ILK emphasizes a holistic approach, participants recommended that the assessments could avoid siloing different topics, and as much as possible pave the way for more holistic approaches to addressing environmental and social challenges. Within this, it will be important for the two assessments to be coherent with each other.

Participants also stressed that the assessments could emphasize the urgency of the current crisis for biodiversity and IPLCs.

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<sup>1</sup> 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.

<sup>2</sup> The IPBES methodological guidance on ILK has information on how to follow the FPIC process in IPBES.

Participants noted that the diversity of IPLCs and their experiences should be reflected, including a focus on local communities, for example Afro-descendent communities in the Americas and their particular situations regarding knowledge, management and use of biodiversity, as well as their rights and recognition by governments.

Participants asked that simplistic generalizations about IPLCs be avoided. The assessments should avoid painting images of IPLCs as poor or as victims. Instead, vulnerabilities could be recognized alongside strengths, and barriers to self-determination could be recognized alongside IPLCs as active change-makers and decision-makers, for example exploring IPLC contributions to the sustainable management of ecosystems and biodiversity that promote transformations for climate action and resilience planning. Highlighting the diversity of contexts and experiences will be key.

As much as possible, context and background to the knowledge presented in the assessments should be included, rather than extracting and presenting decontextualized information.

Participants noted that case studies and examples can be important for showing both context and diversity, and these could be positive and negative, showing the diversity of the situations of IPLCs.

Participants noted that the assessments are taking place during the United Nations Decade of Indigenous Languages, which aims to enhance the preservation, revitalization and support to indigenous languages worldwide and ensure that they are recognized and respected. This could be highlighted in the assessments.

### **3.3. Accessibility, use and impact of the assessments**

Participants recommended that, as much as possible, the policy options and actions presented in the assessments should be practical and achievable for IPLCs, governments and other actors. Policy options could clearly reflect what governments could do to support IPLCs, including through considering rights-based approaches.

Participants emphasized that full consideration of the impacts of business on IPLCs, and the changes needed in that sector, will be important for both assessments.

Participants noted that the final assessments should be easy to read and user-friendly, to make them as accessible as possible for IPLCs and others. Graphics and illustrations to communicate the information will be important. The hope expressed in the workshop was that the assessments can be used directly by IPLCs and others, in addition to other materials that could be produced from them.

## 4. Nexus: Key recommendations and learning from the dialogue<sup>3</sup>

Over the course of the workshop, IPLC participants made a series of comments and recommendations specifically for the nexus assessment, for the consideration of assessment authors. The section below sets out the comments provided by the participants. As much as possible, the text reflects what was said during the workshop by participants, with only minimal editing.

### 4.1. Overarching comments

Participants noted that addressing the nexus is a big and critically important challenge and that this is a good period to think about the different elements in a holistic way. The war in the Ukraine has further demonstrated global interconnections related to food and health, as even IPLCs in Africa are seeing impacts on their food security.

Efforts to achieve global goals and targets such as the Sustainable Development Goals (SDGs) and the post-2020 global biodiversity framework could benefit from the nexus assessment, as currently implementation tends to be slow and haphazard. It was also noted that in many ways the SDGs do not necessarily reflect IPLC priorities and values, and that the nexus assessment could support better alignment between these.

However, participants also noted that the concept of the “nexus” does not necessarily fit with many IPLC conceptualizations, and that it will therefore be important to carefully explore how IPLCs would conceptualize these issues (see section 4.2 below).

Within this, it will be important to work directly with IPLCs, as authors and as workshop participants, and also to engage with indigenous scholarship and community reports that help to explain IPLC conceptualizations, priorities, knowledge, practices and strategies related to the nexus.

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<sup>3</sup> 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.

## 4.2. Conceptualizing the nexus

Participants discussed the ways in which interconnections between biodiversity, food, water and health are conceptualized in their communities, as well as how these diverge from the conceptualization of the nexus currently used by the assessment and its scoping report.

Many participants noted that discussing the “nexus” and its “elements” suggests that each element is separate and that they need to be brought together, whereas for many IPLCs this would already exist as an integral whole. Many IPLCs would therefore not necessarily have a term or conceptualization of the “nexus” in their languages and communities, and attempting a direct translation may not therefore be appropriate.

They also noted that IPLC conceptualisations tend to be much broader, encompassing biodiversity and nature, livestock and crops, food systems, water systems, medicines and health systems, well-being, community, elders, identity, culture, spirits, knowledge, practices, values, governance, energy flows and the universe and cosmos within a single system. Within this system, key themes include balance, complementarity, harmony, reciprocity, respect, relationships and spirituality, recognizing that often all “elements” are considered kin and have spirits, including rocks, water and landscapes.

Participants were also asked to sketch diagrams and images that might help to demonstrate their conceptualizations of what should be considered within discussions on the nexus.<sup>4</sup> These included stylized landscapes showing the interconnections between environment, society and spirits (e.g., from Africa and South-east Asia). These highlighted the importance of considering agroecosystems as ways to explore broader concepts around the nexus, as they include biodiversity, lands and waters, forests and fields, society and spirits, and the interrelationships of these. Other diagrams included the tree of life (e.g., from Central America), concentric circles showing connections between lands, community and spirits (e.g., from South-east Asia, Central America and northern Europe), and an 8-pointed star from petroglyphs (North America). Graphics of traditional seasonal calendars were also suggested as another way of helping to conceptualise this integral whole. Other participants provided concepts or terms that might better explain how IPLCs conceptualize biodiversity, food, water and health and all the related connections (northern Europe and Oceania).

Community objects such as flasks created from trees (e.g., the desert date, *Balanites aegyptiaca* in Uganda, see Figure 2) were also suggested as another way of helping to conceptualise this integral whole. A flask made from the desert date was used to demonstrate how even a single tree can have multiple interacting benefits for communities that cannot be separated out simply into “food” or “health”. Uses for the tree include: the leaves, seeds and dates are used as food for pastoralist communities; the leaves and dates are used as feed for livestock; the wood of the tree is used for making artifacts (such as the water flask shown during the workshop); dates are used for making necklaces; the tree as a whole has various medicinal properties; the bark is used

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<sup>4</sup> These are included in annex 4, but will not be included in the public version of the report, as they are drafts that can potentially be built on with participants.

to make soap; the wood provides fuel; the tree provides shade for humans and livestock and is used as a space for ceremonies; and oil is extracted from the seeds for domestic use and beauty purposes.<sup>5</sup>



Figure 2: The desert date, *Balanites aegyptiaca*, which has many different uses for the Karamajong people of Uganda. Photograph kindly provided by Hannah Longole ©Hannah Longole

A participant from the Philippines also recommended a video made by an indigenous organisations as a way of explaining relations within nature in the Philippines, highlighting that connections to the land are central to identity and culture: <https://pikp.org/2020/09/04/daga-a-nagtaudan-ancestral-land/>.

It was agreed by participants that the assessment would benefit from exploring some of these images and objects as alternative ways of conceptualising the nexus, and that these could be set alongside more scientific conceptualisations in chapter 1 as a way of expanding the framing of the assessment.

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<sup>5</sup> This video provided by a participant explains more about the many uses of the desert date: <https://www.youtube.com/watch?v=E8swkOHqLn8>

### **4.3. Discussions around biodiversity, food, water and health**

#### **4.3.1. The importance of biodiversity, food, water and health**

Many participants highlighted that water is key to life, and that water and spirituality together are life-giving forces. Water ties people and places together. Participants from Africa noted that water is key, and that without water there can be no life, and only with water can there be health, food, livestock, livelihoods, and economy.<sup>6</sup>

Many participants also described health in relation to biodiversity, food and water, as discussed below.

Participants from the Philippines explained that there are different ways to ensure health, and that the entire system needs to be healthy. Food must be healthy, and for many indigenous peoples in the Philippines is created through a holistic system of forest, rivers, water systems, rice fields, home gardens, and upland gardens. This can produce more than 45 types of food crops, providing balanced nutrition. People also rely on medicinal plants, especially as hospitals are often very far away from communities. Another important aspect is community health rituals. People are affected psychologically if they are not done. “Unseen” spiritual aspects of the environment also need to be healthy. Some diseases are caused by doing harm to nature spirits or the ancestors, and there are medicine people who can heal these types of diseases, and rituals need to be performed. The participants also shared what can happen when the system is disrupted, for example in a village where monoculture cropping was adopted and agrochemicals were used, which led to increased hospitalization of children. The community realized that store-bought rice was not as nutritious and fulfilling as their diverse varieties of rice grown in their own ricelands, which are grown organically, and where rituals are performed, including to signal the start of activities within the production cycle. This demonstrated the value of biodiversity, ILK and spirituality to health.

A participant from southern Africa also noted that the strength of traditional health was shown during the COVID-19 pandemic. San people retreated to their villages where they ate traditional foods and used traditional medicines. Rituals and belief are key to their efficacy – if the patient does not believe in traditional medicines they will not work. ILK is also key, to understand which plants can be used, where they can be found and how they can be used.

A participant from eastern Africa noted that science often competes with traditional medicine, but with COVID-19 many people realized that indigenous peoples were not getting as sick. In the future, science and traditional medicine could aim to collaborate.

A participant from northern Europe explained that many facets of community health can be tied to biodiversity – for example to salmon, which is key to some Saami cultures. Water health is an essential element, as is the complex food chain and interdependencies within the water, as it is

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<sup>6</sup> This video explains more about the connections between food, water and health in Karamoja, Uganda: <https://youtu.be/II7X6w5Ekwk>



not necessarily known how impacting one species may impact another species. It is also essential for human health that the community has a strong relationship with salmon. People get nutrients and vitamins from eating the salmon. Fishing is also an important source of exercise, as to row a boat people need to be strong and flexible. People would learn while they fished, including language around the fish and the weather, and this knowledge and practice would tie people to the fish and to the place and give a sense of belonging. The river and rowing were also a form of therapy. Salmon was also key to traditional economies, and allowed people to be self-sufficient. This shows the many different ways that biodiversity and health are linked.<sup>7</sup>

A participant from Central America explained that indigenous health is an integral issue, with many different facets. This includes traditional healers who work on prevention and medicine, who are often employing knowledge gathered for centuries, for example within the Mayan calendar there was a day for work and a day for health. Healers work to heal the body and at the same time the spirit, because for many IPLCs, health is not only body, but also spirit. It is necessary to be physically and spiritually balanced, and in balance with the medicine itself, for indigenous medicines to work. New healers are now strengthening their knowledge and updating traditional medicine. There is a process of research and building information and capacity to develop traditional medicine in pills, oils and creams. This was enhanced with the COVID-19 pandemic. There is also a process of transmission and communication among leaders of the community, as the majority of traditional healers are also traditional leaders, and these overlapping roles are institutionalized within traditional governance systems. Water is also fundamental for Mayan people, and different types of water, including seawater, spring water, groundwater, lake water, river water, rainwater, each have specific purposes for healing. The communities cannot have medicine and health without clean waters, and this is another area where the nexus becomes fundamental.

Another participant from northern Europe also explained how food is medicine. For example, lake fish are essential for community health, and a bile in the fish clears the human body of toxins. Fermented fish is equivalent to a box of vitamins. If people are sick they go to the forest to be healed. The importance could be seen when children were at boarding schools. They were given strong medicines but were not given good food, and they became sick.

#### **4.3.2. Trends**

Participants highlighted a number of challenges across the nexus.

In terms of water, destruction and contamination of water sources by industrial development was highlighted as a major threat, with impacts on health, spirituality, food and biodiversity. In some cases, local waters are contaminated and then clean water is sold back to communities.

In terms of food, a move away from traditional diets with their health and diversity of foods was highlighted, as was contamination of foods by industrial development or chemical spraying.

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<sup>7</sup> For more on Saami relationships with salmon, please see: <https://youtu.be/wKzGwoaqzww>

Genetically modified organisms were also highlighted as a threat. As participants noted, food is medicine, so impacts on traditional foods have significant impacts on indigenous health.

In terms of health, major challenges included the impacts on water and food described above, as well as the loss of healthy livelihoods and declining connections with nature and wellbeing that come with loss of biodiversity. Other challenges include a loss of knowledge around traditional medicines, and the demonization of traditional medicines and rituals by western science. In some countries, traditional medicine and science are running parallel health systems, and IPLCs often choose to use one or the other rather than benefiting from the best of both.

Participants also noted that industrial development, which causes degradation of lands, foods and waters, also has other health impacts, for example increases in gender violence, drugs, alcohol and sex trafficking. Tourism can also bring problems with environmental degradation and social issues, including diseases.

Participants shared different examples of trends and impacts relating to the nexus, as described below.

A participant from South-east Asia explained how a mining company removed an entire mountain close to a community. The watershed was destroyed by pollution and dust in the air. The community could not even use the water for bathing. The mining also impacted food and community health. Often in such times communities will consult their gods, but in this case the mountain was a sacred site, so the spirits themselves were destroyed. This had great psychological impacts on the community.

A participant from northern Europe also explained that there is currently a sharp decline in salmon stocks, and this is reflected in people's health. People suffer from depression because they cannot go to the river, and the foundation of the economy and culture is put into question, as people do not know how they can survive without this key species.

A participant from Central America also noted that some IPLCs suffer from depression due to deforestation, especially as guardian spirits are known to live in forests.

Overall, a lack of awareness within non-IPLC societies about the interconnections between biodiversity, land, water, health, community, spirituality and IPLC health is a significant challenge for many IPLCs.

Participants also noted that unresolved issues around intellectual property can lead to the unfair exploitation of ILK around medicines, with knowledge of medicines taken and exploited with no benefits to knowledge-holders and their communities. In some cases, communities then have to pay to benefit from medicines based on traditional knowledge. This makes many communities wary of sharing what they know.

### **4.3.3. Ways forward**

Participants noted that, in spite of the challenges discussed above, growing recognition of the environmental crisis and its impacts on human health, particularly with the COVID-19 pandemic, means that these issues are receiving increasing attention, which presents opportunities for change. As it is increasingly recognized that biodiversity and health are linked, and that IPLCs do much to protect biodiversity, it can be seen that in many ways IPLCs are supporting global health.

In terms of ways forward, participants highlighted that lands, waters, biodiversity and food systems need to be better protected as an integrated system. Participants highlighted that there needs to be more recognition that “when we heal the land, we heal ourselves.”

Relating to health, participants highlighted that there needs to be better collaboration between western science and traditional knowledge on medicines, with the two working together to support IPLC health needs in a holistic manner. In particular, important connections between food, water, spirits and IPLC health need to be recognized by all, and space needs to be provided for rituals and other essential practices.

In order for this to be possible, participants noted that respect and equality between the systems needs to be generated. In this, dialogue between scientists and IPLCs will be key, and better use could be made of existing methods for working with IPLCs. A code of conduct and other protections may be needed to protect knowledge-holders. It will also be beneficial for policymakers to discuss directly with IPLCs, rather than this dialogue being mediated by researchers and research.

Formal recognition by international bodies such as the World Health Organization (WHO) could also enhance support, recognition and work for traditional medicines, and participants recommended a benchmark study by the WHO on traditional medicines. Greater explorations of concepts such as One Health from an IPLC perspective are also needed.

Positive examples were given from a country in Central America, where there is a local ministry for traditional medicine and hospitals with traditional treatments, and organizations for traditional healers. In South-east Asia a university also set up an online traditional medicine database. This contains intentionally only a small amount of information, and people wanting to know more are directed to the communities in question. In North America, there have been rulings that recognize the right of First Nations to pursue traditional medicine.<sup>8</sup>

Participants also highlighted that better protection of intellectual property needs to be in place around ILK, especially as it relates to traditional medicines, so that communities can feel more comfortable about sharing what they know and to ensure that there are benefits to communities. Biocultural community protocols can also help to ensure that clear rules are defined and followed by researchers, business and governments working with IPLCs.

A focus on gender and women’s health will also be critical, recognizing the many ways that women are impacted by issues across the nexus, and their contributions.

Participants also noted that on-going work around indigenous indicators could help to inform and monitor change across the nexus.

Overall, participants highlighted that transformative change is needed across the nexus and beyond, as is described in Section 5 of this report.

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<sup>8</sup> For more information see: <https://ohrh.law.ox.ac.uk/aboriginal-right-to-pursue-traditional-medicine-recognised-by-canadian-judge/>

## 5. Transformative change: Key recommendations and learning from the dialogue<sup>9</sup>

Over the course of the workshop, IPLC participants made a series of comments and recommendations specifically for the transformative change assessment, for the consideration of assessment authors. The section below sets out the comments provided by the participants. As much as possible, the text reflects what was said during the workshop by participants, with only minimal editing.

### 5.1. Overarching comments

Participants emphasized that transformative change is urgently needed for society as a whole, and that there is a need for paradigm shifts and learning from IPLC worldviews where nature, culture and spirituality are one.

Participants noted, however, that the role of IPLCs within transformative change needs to be carefully considered, as often IPLCs are already living in harmony with nature, or if they are not, it is often due to outside influences limiting their ability to do so. Careful consideration of roles and responsibilities of different actors is therefore key.

They also noted that the need for global transformative change is often more pressing for IPLCs than other groups, as they are most at risk of climate change and other threats generated by current systems. They noted that in the past, change was governed by cycles, but that these are quickening, and many IPLCs are struggling to adapt.

Participants also highlighted that transformative change itself may not translate well into indigenous and local languages, so care is needed in exploring this concept from an IPLC viewpoint (see section 5.2 below). There may also be a number of risks for IPLCs associated with transformative change (see section 5.3 below). Nonetheless, participants pointed to many pathways for change that would be transformative for their communities (see section 5.5).

Participants also recommended that participation of IPLCs during the assessment process is key, and that authors should try to engage with indigenous research methodologies, including thinking of innovative ways to co-develop the assessment.

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<sup>9</sup> Disclaimer: The text in section 5 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.

## 5.2. Conceptualizing transformative change

Participants discussed the conceptualization of transformative change given in the Global Assessment of Biodiversity and Ecosystem Services (2019): “fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values.”

Many participants noted that transformative change may not be an easy concept to translate into many indigenous and local languages, and warned against attempting a simple translation of a word or a few words. Instead, it may be more important to explore similar concepts within IPLC languages and worldviews.

They discussed that in the past IPLC societies have often gone through significant changes, and this is well conceptualized and expressed in many IPLC languages. For example, for Mayan communities, cycles of change and rebirth are connected to five “suns”. Māori also have an expression “*tēnei, tēnā, tērā*” – “this, that and that over there” – now, short term, long term – reminding them that change is incremental, and that pathways to their vision needs to have these layers. Participants also noted that for many IPLCs, change must include consideration of past, present and future.

Participants also highlighted the key difference between adaptation, which IPLCs have often been forced to do in the face of outside pressures, including environmental change and colonialism, and change that they might choose for themselves. If IPLCs could be drivers of their own change, this would be transformative for their communities. This does already happen in some instances. Currently, however, this control over change is often hindered by national governments and other actors and institutions outside of communities.

Participants also noted that the concept of transformative change does not seem to have been created by IPLCs, and that IPLCs may need to create their own conceptualizations to express the changes they want. For example, some languages convey concepts better through metaphors or symbols rather than abstract terms.

One example that has some similarities with the concept of transformative change shared during the workshop is the concept of “Saamification” from Scandinavia, which is used to describe efforts to decolonize education and governance and build new structures and relationships based on Saami values, including relationships with nature, and building more sustainable ways of life and practices. These changes would be transformative for Saami communities and are actively being sought and created.

Participants also highlighted key concerns with the concept of transformative change as given in the IPBES Global Assessment, including the word “reorganization” which can imply repackaging the same systems rather than making a fundamental change and a paradigm shift.

### **5.3. Risks of Transformative change**

Participants noted a number of risks for IPLCs that could come from transformative change.

Transformative change could risk becoming an imposition of other values systems onto IPLCs. For example, sustainable development has become a defining global vision, which often does not leave space for other visions. Such majority visions can be so strong that unwanted development is pushed onto communities. An example was given from northern Europe, where the new push for “green” energy is increasing pressure on Saami lands as companies search for new minerals and sites for wind turbines. This competes with traditional uses of the land.

Participants also questioned who needs transformative change. They advised against assuming that IPLCs need to change, when often they had been living in harmony with nature, with their own governance structures, until outside forces pushed them onto different paths. For some IPLCs, it may, however, be necessary to change to adapt to current conditions, but they may wish to maintain and revitalize their cultural foundations as they do so, for example relationships with land and ancestors.

Overall, participants noted that different societal groups need to be considered separately within the assessment, as different aspects of society may need to change in different ways.

Participants noted that much would depend on how transformative change is conceptualized and whose values are driving this change.

### **5.4. Visions of a sustainable world**

Participants discussed their visions of a sustainable world, though they noted that it can often be hard to create positive visions given current trends.

A participant from the Philippines shared a worldview characterized by interrelationships, between individuals and their land, environment and fellow people in their community, including future generations, where all is whole and interconnected, and where there is balance and harmony. Within this, the most important aspect is spiritual relationships with the “unseen”, and spiritual energies that have a role in nurturing water and forests.

Many participants highlighted that a renewed relationship and solidarity with nature, including seeing animals, plants, rivers and mountains as part of the community, would be key to a sustainable future.

A participant from New Zealand noted that there are four realms that need to be in balance – spiritual, social (including other humans and the environment), the physical world and the mental/knowledge system. Within all of this, water and spirituality are life-giving forces.

Participants from Cameroon and Uganda noted that water is key and that in a sustainable world water would give life and support health, food, livestock, livelihoods, the economy, etc.

A participant from Nepal highlighted the importance of indigenous food systems, and how they maintain relationships with lands, waters, and health. Because of ILK, indigenous peoples understand the changing behavior of Mother Nature, such as the flying of the firefly which shows

the right season for summer farming, or the right time, day and moon phase to collect medicines and the related effectiveness of medicines for health, as well as the importance of spiritual communication with nature for wellbeing.

The indigenous health system was also highlighted as a central feature of sustainable futures.

Participants from the Philippines and Bolivia highlighted that while technology brings many advantages, there is also a need to maintain traditional ways of knowing and experiencing the world, for example in the past people were educated by listening to the wind and the animals.

A participant from Mexico noted that from visioning work done with communities in Oaxaca, they also highlighted their wishes for prosperity, good health, cultural exchanges, education, markets with fair prices, and infrastructure including roads.

Participants highlighted that a rebalancing in power relations would also be key, so that communities can make their own decisions through their own governance systems. Rights to lands and waters would be recognized, and communities would receive fair benefits from their knowledge and resources, and opportunities to participate in policymaking, research, development and business on their own terms and based on their own values.

Participants also expressed visions in which society as a whole would have respect for IPLCs and a desire to learn from these communities.

## **5.5. How transformative change occurs, and challenges, actions and roles**

### **5.5.1. Knowledge and language**

Participants emphasized that indigenous and local knowledge, values and worldviews are crucial for transformative change, as they emphasize how to manage relationships between people, places, plants, animals, spirits and past and future generations.

IPLC worldviews, which include “all of creation” in North America, “unseen” spirits in Asia, and a sense of community that includes rivers, mountains, plants and animals and spirits, are key to maintaining these relationships. For example, for Saami, asking for permission is a guiding principle. If someone wants to build a house in a place, they will spend one night there before they build. This is a way of asking for permission from the place if they are welcome to build their house there. When catching fish, Saami also ask the species if they are willing to give their life to the people. Participants noted that the positive impacts of these IPLC management systems based on their knowledge and worldviews can be seen in many different environments, for example in the Amazon.

Participants also emphasized that in the case of the Amazon, and also in other regions such as the Chocó Biogeographical Region in Colombia, the Caribbean, and in many parts of the United States, the descendants of African indigenous peoples contribute significantly to the management and preservation of biodiversity, using traditional African knowledge and cultural and spiritual beliefs that are now reflected in management of the ecosystems of the Americas. Participants also noted that these contributions are often overlooked as afro-descendent

communities often remain invisible in policy, and in conceptualizations of holders of knowledge and rights.

Much ILK is intangible and strongly tied to local environments, and to practices that take place in those environments. It is also often encoded in indigenous and local languages, and many terms and concepts cannot be translated across to mainstream languages. As such, much ILK is not documented and much of it cannot be documented at all. This risks a decline in knowledge and values for many IPLCs if the associated environments, practices and languages decline or deteriorate.

In general, much ILK is currently diminishing with societal change and with changes in environments, for example due to climate change which disrupts the cycles of nature and therefore the knowledge and livelihoods of fishers, hunters and farmers. Indigenous and local languages are also vanishing alarmingly fast, partly due to the imposition of mainstream languages and education systems (see also the next section on education). For example, more than 26 indigenous languages are facing imminent extinction in Nepal, and if they disappear then much of their associated ILK would also be lost. As a result of these changes, many IPLCs are losing their relationships with food, water and past and future generations.

In this regard, for many IPLCs the revitalization of ILK, and reconnecting and strengthening relationships and practices that are crucial to ILK and protecting and restoring the lands and waters that these in turn depend upon, can be a crucial aspect of transformative change.

### **5.5.2. Worldviews and values**

Participants also highlighted that IPLC values and worldviews are also encoded in ILK and IPLC languages, and strongly connected to environments and livelihoods. They are therefore also at risk. Maintaining and revitalizing these values and worldviews would be key to transformative change.

A participant from northern Europe noted that in the Arctic, winters are diminishing and key species such as salmon are disappearing, and that change is the new normal. However, if the environment is changing and Saami livelihoods are changing, Saami want to be able to respond to this based on their own values, so that they will still have connection to the environment and animals in the future. Communities want to define how they change and adapt based on what is good for their culture. They highlight that these decisions should not be made outside of the communities based only on economic concerns.

Participants highlighted that formal religion can also play a major role in shaping values and how people live their lives, both for IPLCs and non-IPLC societies, and as such it is key to transformative change. Many formal religions demonize IPLCs' relationship with nature, and in many cases IPLCs themselves have taken up these religions due to colonialism. The damage done to traditional belief systems is often unaddressed by IPLCs as they are now committed to the majority religion. However, in many cases, for example in the Pacific and North America, IPLCs practiced the colonial religion whilst maintaining many of their former beliefs and practices, often in secret, and they were able to maintain both systems, which demonstrates impressive resilience.



Some participants noted that elders will no longer discuss traditional spirituality with outsiders or even with youth from their own communities, as they feel they will not be understood or accepted. Finding ways to sensitively explore and revitalize traditional belief systems could be key to transformative change, and a first step may be finding ways to discuss spirituality with younger generations and with people from outside of the community, while also recognizing that it is not necessary for people from outside of IPLC communities to understand everything, and that they can learn to respect those systems without fully understanding them. Building methods for revitalizing intergenerational transfer of knowledge and values between individuals could be key.

Participants also noted that there is a need for a change in broader societal priorities, away from prioritizing economic values, and instead valuing wellbeing and environmental health. Participants noted that many governments do not seem to recognize that protecting ecosystems is beneficial to all, including governments. Within current systems, many companies seem to have more rights than other members of society, particularly IPLCs.

Participants also noted that society as a whole has a responsibility to change its views about indigenous places. These should be viewed not as empty wilderness areas from which to extract resources or to go for leisure or relaxation, but as important sites for livelihoods and biocultural diversity. This change in values and respect is needed from non-IPLC society.

Broader society may have much to learn from IPLC values and worldviews in a move towards transformative change. Transforming relationships is key, including how people relate to both one another and the environment. These kinds of guiding principles of respect and humility could help to address current environmental issues. In efforts to learn from IPLCs, it may also be important to identify points of similarity and agreement rather than only looking at differences.

### **5.5.3. Education**

Participants highlighted that education would be key to transformative change, in particular to addressing the declines in knowledge and language and the shifts in values and worldviews described above. They noted that in the past, IPLCs would often learn through practical experience in the environment, including through learning on the land with elders or through listening to the wind or the rivers. Now, formal school learning and textbooks have often replaced such long-term connections with the community or environment. Participants highlighted how indigenous educational principles have been disrupted and suppressed in different contexts.

Part of the solution to this may be changing the value put on different modes of learning and different ways of knowing, creating a balance between building relationships with nature and knowing facts and information.

Participants shared how, in the Philippines, attempts are being made to revitalize indigenous ways of learning and knowing, including storytelling from elders and making use of the whole ancestral domain as a classroom for children, to show them the interconnectedness of human wellbeing to what nature can provide and teaching children how to care for the forests and rivers, and the benefits derived from them.

It may also be beneficial to bring indigenous and local knowledge and values into the classroom, recognizing, however, that much cannot be taught in a classroom environment. Nonetheless, this can help to make children more open to learning in other contexts outside of the classroom.

Indigenous and local languages are key to much ILK and values, as discussed above, and efforts to bring these languages into classrooms and formal curricula could support community efforts to enhance transmission, as could documenting these languages. In such efforts, spending long periods of time working with the elders and other holders of the languages is key, as much can be lost in documentation processes.

Participants also highlighted that it is crucial to pay attention to how wider society is educated. This can include national curricula, including building information about IPLCs, transformative change and sustainability into schools and universities. It can also include the media, which in many cases portrays IPLCs negatively, for example as poor or dangerous. Working with the media to change this narrative could have a big impact on shifting mainstream perceptions of IPLCs. Tourism on IPLC lands can also provide an opportunity to educate people about IPLC knowledge, values and management practices.

#### **5.5.4. Research and development**

Participants highlighted that research can also be key to revitalizing and continuing indigenous and local knowledge and values, but that safeguards must be in place to ensure that research is done in ways that serves community needs and goals, including FPIC. This could support transformative changes at the local level.

Consultation with community members before research takes place is key, to determine if communities want or need a research project or how it can be adapted to community needs. Communities should have the right to say no to research or developments that do not meet their needs. Moreover, communities should be asked to approve drafts of materials or reports created with their knowledge.

Research contracts between communities and researchers can be important tools, which can formalize the agreement that if researchers are using community knowledge there must be benefits to the community. This could also include products or profits being returned to communities. For example, in southern Africa, 1% of profits from rooibos tea will now be returned to the communities. This was a complicated negotiation process first involving national governments, and then business and researchers. Such agreements can also stipulate that research will include co-researchers and assistants from the community, and training of community members can be an essential component. Communities can also develop their own protocols, which explain what aspects of their knowledge they are prepared to share. Some of this work has also taken place at the international level, for example the International Society of Ethnobiology met with indigenous groups and developed a code of ethics on how to do research, which is available in multiple languages.

Protection of ILK is also needed to support community research and development. In some countries in Central America, traditional knowledge and medicines are recognized by the state, as is collective ownership by IPLCs of that knowledge. Communities have therefore been able to successfully protect their intellectual property, for example when a major clothes manufacturer

started to use their traditional designs. However, it is important even in these cases that communities are aware of and able to assert their rights, and negotiations can be intense. In many cases, communities have no such protections.

Overall, the burden is often placed on communities to be well-organized and to push hard for their needs to be met in the context of research. Researchers and governments could do more to support communities, and to help to inform communities of their rights within these processes.

Many communities or IPLC individuals may wish to conduct their own research or development projects, and to document their knowledge and culture for future generations. These can include indigenous research methodologies, protocols and processes, including rituals and ceremonies. This may be one of the most effective ways of documenting and working with ILK and ensuring benefits to communities. In other cases, community projects may have goals that are more focused on creating intergenerational dialogues and shared experiences so that intangible ILK and values can be learnt between generations, rather than producing a fixed research product. In terms of transformative change, some communities may also wish to discuss and analyze how to change and what to retain or revitalize.

However, often there is little support available in terms of capacity-building or funding, and many governments or funding agencies may not understand community goals or methods, and are consequently wary of distributing funds. Lengthy, complicated processes for applying for funds can deter many IPLCs from attempting to receive funds, and corruption or unequal distribution of funding can mean that even where an application is successful, little money filters down to the community level, while outside researchers and NGOs can be the biggest beneficiaries. In these cases, the priorities and needs of these bigger organizations can often come to dominate research and development processes. Timelines of funding, which are often based on short cycles of months or a few years, can also be out of sync with the needs of communities for long-term, consistent support. The goals of research may also need to change, from producing theoretical academic papers or reports to affecting real practical changes in communities.

Change may also be needed in perceptions of who is an “expert”. Often academics with some years of studies are prioritized over elders with decades of knowledge and experience and communities with centuries of accumulated knowledge and experience. Researchers, NGOs and others may need to learn to value the experience of IPLCs and see schooling, research or development projects as an opportunity to learn from IPLCs rather than as an opportunity to educate.

#### **5.5.5. Customary governance**

Participants highlighted that revitalizing and building support for customary governance systems would be highly important for transformative change. These customary governance systems are generally based on ILK and IPLC values, including principles of relationality, do-no-harm, reciprocity and balance. Participants noted that there is a lot of evidence for the success of customary governance systems in managing landscapes, species and resources. For example, in southern Africa, communities understand all the different forms of water, including water that is stored in plants, and they are therefore able to effectively manage this scarce resource, as “the

more you know the less you need”. Examples were also given from eastern Africa of how IPLCs can be more willing to trust and follow agreements for conflict resolution based on traditional governance systems than those made with and by national governments.

Participants emphasized that developing multi-level governance frameworks that support and facilitate customary governance at the local level could therefore be an effective way of managing environments. This would require supportive policies from national and local governments. This would be transformational, supporting the self-determination of communities, allowing them to control the ways they adapt to the changes that are happening around them.

Participants shared examples of good practice for IPLCs, including Nordic countries where transformative rulings by the courts about land and cultural rights mean that villages can govern fishing and hunting of small game. In some countries in Asia, local-level government supports community protocols, including fines for people who guide mining companies. In some countries in Central America, indigenous territories are also recognized by the state, as are traditional knowledge and medicines and collective ownership by IPLCs of that knowledge. Plans or projects proposed at the national level cannot be implemented without permission from the congress of these indigenous territories. However, this still involves a lot of negotiation, and the communities need to be strong, determined and well-organized in this highly contentious space.

Participants highlighted that biocultural community protocols developed by communities, which set out the “rules of the house” can also be important for establishing good relationships and avoiding conflicts with governments and businesses before projects are implemented. Good examples come from Oaxaca, Mexico, where communities have received recognition by governments for their protocols. The *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization* also recognizes biocultural community protocols, giving them an international framework of support.

More research may also be needed to highlight the contributions of customary governance to natural resource management. This can include finding “hidden actors”, for example Afro-descendent communities in much of Latin America, who brought their knowledge and management systems with them from Africa to make positive contributions to landscapes and biodiversity in areas such as the Amazon, but whose contributions and governance systems may not be well recognized. In other countries, for example in Africa or Asia, many groups are not recognized as indigenous, which may impact how they are seen in terms of rights and environmental knowledge and management.

In order for this transformation to occur, IPLCs may also need support to strengthen their own capacity to manage their resources and communities, and to organize or rebuild their institutions and governance systems, as in many cases this power was removed from their communities long ago. A focus on women’s knowledge, power and governance systems may also be crucial within these processes.

Participants noted that corruption at all levels can be a challenge in customary governance processes. Industrial development often brings with it not just environmental issues, but also social issues including corruption, violence, drugs and sex-trafficking. Often, little consultation

takes place before industrial development starts on IPLC lands. Another key related challenge is violence against environmental defenders and community leaders, who are often attacked and killed for defending their communities, lands and rights.

Crucially, participants highlighted that customary governance cannot really function without the recognition of indigenous rights at national and local levels, including land rights and land tenure. Communities want to be able to implement their customary governance decisions on their lands, and to say “no” to developments and activities proposed by companies or governments that are not coherent with IPLC values and management of the environment. Participants highlighted that many IPLCs may not be aware of their rights, and so awareness-raising and outreach may be needed.

Overall, participants emphasized that if new institutional arrangements and governance systems will be created for transformative change, then customary governance systems should be revived and enhanced within this, as a crucial element of sustaining life and protecting nature, including humans.

#### **5.5.6. National and international policymaking**

Participants highlighted that another key step towards transformative change would be enhanced participation of IPLCs in national policymaking and the co-development of policies that support rights and customary governance at national and local levels. A key challenge currently in many countries is that national-level policies are not well adapted to realities for IPLCs on the ground. These policies can then be difficult to implement, or can actively hinder IPLC efforts to manage their communities and resources and adapt to change. Dialogue between governments and IPLCs can be crucial in resolving these issues.

Participants also highlighted that national-level environmental frameworks often need to be strengthened, as do national budgets allotted to managing biodiversity and climate change.

Participants also noted that more progress needs to be made at the international level to increase the focus on biodiversity, as climate change has often taken priority and attention. The sustainable development goals may need to be interpreted internationally and locally in terms of IPLC priorities and aspirations. The post 2020 global biodiversity framework is also a key area where attention is needed, as this could potentially be a key instrument in terms of transformations towards biodiversity conservation, sustainability and IPLC needs. Participants also noted that the United Nations Declaration on Human Rights and the United Nations Declaration on the Rights of Indigenous Peoples often seem to be superseded by corporate interests and noted that a strengthening of such instruments is needed.

## 6. Next steps

The following next steps took place after the dialogue workshop:

- Development of a report from the dialogue workshop (this report). The draft report was sent to all participants for their edits, additions and/or approval before being finalised.
- A call for contributions on ILK will be released in the second half of 2022 to encourage the submission of materials that could inform the assessments.
- Author teams may reach out to IPLCs to invite them to be contributing authors.
- Another dialogue will be organised in early 2023 around the review period for the first order draft of the assessments' chapters.

## Annexes

### Annex 1: Agenda

**Colours:**

Blue = both assessments

Yellow = transformative change

Green = nexus

<b>Wednesday 29 June</b>	
8h30-9h00	Registration
9h00-9h45	Opening, introductions
9h45-10h30	Introduction to IPBES and its work on ILK Aims, methods and agenda of the dialogue How can the dialogue be most useful for all participants? Free Prior and Informed Consent
10h30-11h00	<i>Refreshment break</i>
11h00-11h30	Introduction to the transformative change assessment: aims, methods, timelines, chapters, final product, ILK in the assessment, progress so far
11h30-12h30	Questions/Discussion: Is the concept of transformative change used by and/or useful for IPLCs? How would this be expressed in IPLC conceptualizations?
12h30-14h00	<i>Lunch</i>
14h00-15h30	Discussions: What are IPLC visions of sustainable futures? (at community, national, global levels?)
15h30-16h00	<i>Refreshment break</i>
16h00-18h00	Discussions: How could these visions be achieved? What would be transformative about these changes? (What are the challenges? Who are the key actors and what are their roles?)

<b>Thursday 30 June</b>	
9h00-9h15	Updates, review of day 1, plan for day 2
9h15-10h30	Discussion continued: How could these visions be achieved? What would be transformative about these changes? (What are the challenges? Who are the key actors and what are their roles?)
10h30-11h00	<i>Refreshment break</i>
11h00-12h00	Discussion: Overarching issues: In terms of broad societal transformative change, what are the risks and opportunities? What would be needed to ensure that transformative change is of benefit to IPLCs? How can the assessment be useful for IPLCs?
12h00-12h20	Moving forward: key approaches, participants and resources
12h20-12h30	Next steps for the transformative change assessment
12h30-14h00	<i>Lunch</i>
14h00-14h30	Introduction to the nexus assessment: aims, methods, timelines, chapters, final product, ILK in the assessment, progress so far
14h30-15h30	Questions / Discussions: Conceptualising the nexus
15h30-16h00	<i>Refreshment break</i>
16h00-16h30	Discussions: Conceptualising the nexus (continued)
16h30-18h00	Discussions: Food, biodiversity, water, health and climate

<b>Friday 1 July</b>	
9h00-9h15	Updates, review of day 2, plan for day 3
9h15-10h30	Discussions: Water, biodiversity, food, health and climate
10h30-11h00	<i>Refreshment break</i>
11h00-12h30	Discussions: Health, biodiversity, food, water and climate
12h30-14h00	<i>Lunch</i>
14h00-14h50	Overarching messages and themes, key approaches and participants How can the nexus assessment be useful for IPLCs?
14h50-15h00	Next steps for the nexus assessment
15h00-16h00	IPLC caucus
16h00-16h15	<i>Refreshment break</i>
16h15-17h15	Report back from the IPLC caucus and discussion
17h15-17h30	Participation in the two assessments: Timelines for collaboration, communication and dialogue throughout the assessment processes, identifying key experts, resources
17h30-18h00	Next steps and closing



## **Annex 2: FPIC document**

### **Free, Prior and Informed Consent: Indigenous and Local Knowledge Dialogue on the IPBES Assessments on the Nexus of Biodiversity, Food, Water and Health and Transformative Change**

*29 and 30 June and 1 July in Bonn, Germany*

The individuals whose names are listed in annex 3 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, challenges and visions, broadly around the themes of the assessments, to help shape the assessments in their early stages. If participants agree, a report may 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 assessments, 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](mailto: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

Indigenous peoples and local communities		
Ramiro Batzin	Guatemala	Co-chair, International Indigenous Forum on Biodiversity
Q'apaj Conde	Bolivia	Convention on Biological Diversity
Florence Daguitan	Philippines	Tebtebba, Philippines
Guadalupe Yesenia Hernández Márquez	Mexico	ILK focal point for IPBES in Mexico
Aslak Holmberg	Norway	Vice President, Saami Council
Onel Masardule	Panama	Executive Director, Foundation for the Promotion of Indigenous Knowledge (FPCI)
Kamal Kumar Rai	Nepal	Society for Wetland Biodiversity Conservation / IPBES ILK task force / nexus author
Hannah Longole	Uganda	Executive director of Ateker Cultural Center
Aehshatou Manu	Cameroon	Secretary General of the African Indigenous Women Organization - Central African Network (AIWO-CAN)
Lucy Mulenkei	Kenya	Co-Chair, International Indigenous Forum on Biodiversity (IIFB)
Sherry Pictou	Canada	Schulich School of Law, Dalhousie University / IPBES ILK task force
Maria Elena Regpala	Philippines	Partners for Indigenous Knowledge Philippines
Martha Rosero	Colombia	University of Florida
Nicholas Roskruge	Aotearoa-New Zealand	Te Atiawa / Ngati Porou / Ngati Tama, Professor in Ethnobotany; Chairman, Tahuri Whenua National Maori Horticulture Roopu
Polina Shulbaeva	Russia	Centre for Support of Indigenous Peoples of the North (CSIPN)
Joram Useb	Namibia	Indigenous Peoples of Africa Coordinating Committee

IPBES transformative change assessment		
Karen O'Brien	Norway	co-chair
Juan Martin Dabezies	Uruguay	Chapter 1
Claudia Monica Campos	Argentina	Chapter 3
Nicholas Roskruge	Aotearoa-New Zealand	Chapter 3
Keisha Garcia	Trinidad and Tobago	Chapter 4
Rodwell Chandipo	Zambia	Chapter 5
Camille Guibal	France	Technical support unit

IPBES nexus assessment		
Pam McElwee	USA	Co-chair
Diana Sietz	Germany	Chapter 1
Denise Margaret Matias	Philippines	Chapter 4
Maysoun Mustafa	Sudan	Chapter 5
Kamal Kumar Rai	Nepal	Chapter 5
Andrea Pacheco	Honduras	Chapter 6
Tiff van Huysen	USA	Technical support unit

<b>IPBES task force on indigenous and local knowledge</b>		
Ana María Hernández	Colombia	IPBES Chair / Co-chair of the task force
Adriana Flores	Mexico	Co-chair of the task force
Sherry Pictou	Canada	Task force member
Kamal Kumar Rai	Nepal	Task force member
Peter Bates	United Kingdom	Technical support unit

## **Annex 4: Images for conceptualizing the nexus**

During the workshop, participants were asked to sketch images that would help to convey their conceptualizations of the nexus, which could be broader than the nexus itself and could include any elements or themes that they deemed appropriate. These images will not be made publicly available, and they are therefore not included here, but they are available to assessment authors as a resource and a basis for further work and discussion with participants.

