Report

Third indigenous and local knowledge dialogue workshop for the IPBES thematic assessment of invasive alien species and their control

Online, 1-3 February 2022

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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.

Contents

1. Introduction

1.1. This report

This is the report of the third indigenous and local knowledge (ILK) dialogue workshop for the IPBES thematic assessment of invasive alien species and their control (the IAS assessment), which was held in the context of the external review of the second order draft of the chapters and first order draft of the summary for policymakers (SPM) of the IAS assessment. Due to COVID-19, it was held online, from 1 to 3 February 2022. 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 IAS assessment, and also by all dialogue participants who may wish to keep abreast of, 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 over the coming months and years. For this reason, clear points of agreement are discussed, but, if there were diverging views among participants, these are also presented for further attention and discussion.

The text in sections 3 represents an attempt to reflect solely the views and contributions of the participants in the dialogue. 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 IAS assessment in 2019, and it will run until 2023.

Participation of indigenous peoples and local communities (IPLCs) is crucial to this assessment, as many IPLCs have first-hand knowledge of the positive and negative impacts of invasive alien species (IAS) on ecosystems and people. Many IPLC groups also employ their knowledge of the environment to develop responses or management strategies for IAS. Many IPLCs wish for their knowledge, needs and views to be considered appropriately in both research and management of IAS.

The second order draft of the IAS assessment chapters and first order draft of the SPM were available for external review between 15 December 2021 and 15 February 2022. External reviews are one of the most important phases in the IPBES assessment process. They allow governments, scientists, decisionmakers, practitioners, IPLCs and other knowledge holders to provide feedback

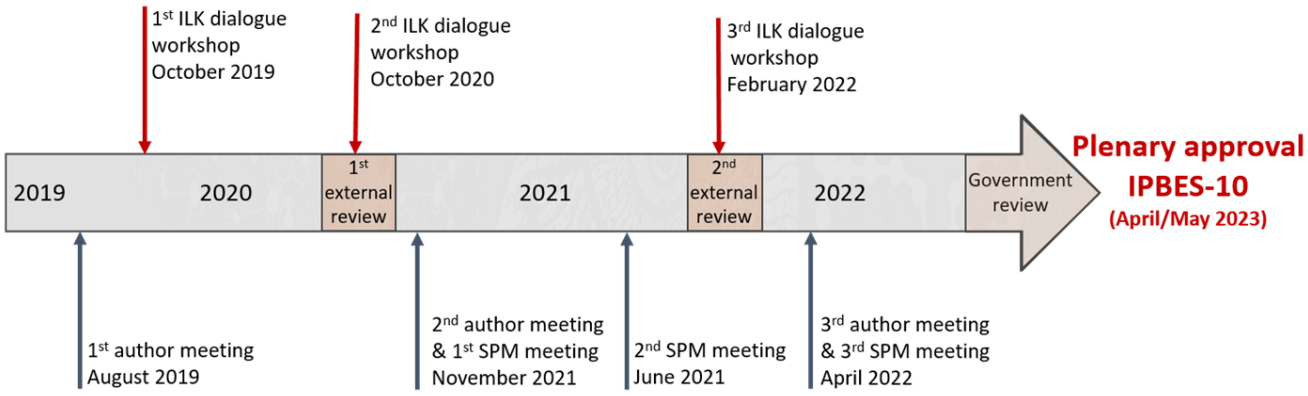
on the assessment draft. The widest-possible participation and most diverse engagement in the external reviews is vital to ensure the quality and policy relevance of the assessment.

An online ILK dialogue was therefore held from 1 to 3 February 2022 to facilitate the participation of IPLCs in the review process.

This dialogue workshop continued the discussions of the first and second ILK dialogue workshops for the assessment, which were held in November 2019 in Montreal, Canada, and September/October 2020, online (see figure 1).

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 *IPBES approach to recognizing and working with ILK*, which was approved by the IPBES Plenary in decision IPBES-5/1, as explained in section 2.4 below.

Figure 1: Timeline of the IAS assessment



1.3. Objectives and process of the ILK dialogue workshop

The objectives of the third ILK dialogue workshop for the IAS assessment were as follows:

- Enhance dialogue between assessment authors and IPLCs;
- Provide a platform for IPLCs to provide comments and feedback on the second order draft of the assessment chapters and the first order draft of the SPM, in order to inform authors on how to further develop the assessment in relation to ILK;
- Explore how IPLCs experience and understand invasive alien species;
- Explore how IPLCs respond to, adapt to and manage invasive alien species;
- Discuss how the invasive alien species assessment could be useful to IPLCs; and
- Identify resources and sources of information that could be included in the assessment.

Recommendations and other comments made by participants during the workshop on the draft documents were compiled in the IAS assessment review template. Workshop participants were

invited to review these comments by 14 February 2022, and following additional edits and no objections from participants, these were submitted to the IPBES secretariat on 15 February 2021. A report (this report) was also developed to enhance the accessibility of the workshop results for a wider audience.

1.4. FPIC

Free, prior and informed consent principles (FPIC) 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.

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 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's work with IPLCs and on ILK has also been supported by a technical support unit (TSU) 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 "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 assessments, most recently for the assessments on sustainable use of wild species, values of nature, and IAS.

2.2. The IPBES assessment of invasive alien species and their control

The IAS assessment was initiated after the seventh session of the Plenary (IPBES 7, Paris, France, 2019) following a decision from the IPBES Plenary at its sixth session (IPBES 6, Medellin, Colombia, 2018).

The assessment is led by three co-chairs, Aníbal Pauchard,[1] Helen Roy[2] and Peter Stoett.[3] About 80 experts from more than 40 countries were carefully selected to encompass all regions and required expertise. They will be assessing the current status and trends of IAS and their impacts, taking into account diverse knowledge and value systems and providing policy-relevant options to promote effective IAS management and adaptation strategies. The assessment is supported by the technical support unit on invasive alien species (IAS TSU).

The objectives of the IAS assessment, as set out in the scoping document,[4] are to assess:

- The array of such species that affect biodiversity and ecosystem services;
- The extent of the threat posed by such species to various categories of biodiversity and ecosystem services, including impacts on agrobiodiversity and food, human health and livelihood security;
- The major pathways for and drivers of the introduction and spread of such species between and within countries;
- The global status of and trends in the impacts of such species and associated management interventions by region and subregion, taking into account various knowledge and value systems;
- The level of awareness of the extent of IAS establishment and their impacts; and
- The effectiveness of current international, national and subnational IAS management measures and associated policy options that could be employed to prevent, eradicate and control IAS.

Three cross-cutting themes in the IAS assessment are supported by liaison groups. They are:

- Indigenous and local knowledge
- Good quality of life
- Scenarios and models

Each liaison group is comprised of representatives from each chapter. The liaison groups' role is to ensure that their cross-cutting theme is well represented, in a consistent manner, throughout the assessment. The ILK liaison group is supported by the IPBES TSU on ILK.

[1] Laboratory of Biological Invasions (LIB), Faculty of Forestry, University of Concepcion, Concepcion, Chile; and Institute of de Ecology and Biodiversity (IEB), Santiago, Chile.
[2] UK Centre for Ecology & Hydrology, Wallingford, UK.
[3] Ontario Tech University, Oshawa, Canada.
[4] IPBES/6/INF/10.

2.3. Key indigenous and local knowledge questions to be addressed by the invasive alien species assessment

A series of questions was developed by the ILK liaison group and discussed during the assessment's first dialogue workshop. The questions aim to frame the work with ILK in the assessment. The aims of the questions are to ensure that each chapter addresses ILK and IPLC issues, and that the assessment has an overall narrative between chapters. The questions were sent out to participants in advance of the second dialogue workshop for their consideration. Further comments on the questions were also invited from participants. The questions are as follows:

Chapter 1: Conceptualization

a) From the perspective of IPLCs, is there a conception of an "invasive alien species"? Do IPLCs distinguish it from "native species"? How is this expressed?
b) Do IPLCs see some species as having any negative impact on their communities, lands or waters?
c) How do IPLCs obtain information about IAS? Examples of sources could include elders, on-country trips, hunting, fishing and gathering, continued cultural knowledge transfer, participation in citizen science initiatives, schools and education, reports from the younger generation, reports only from outsiders, or others.

Chapter 2: Trends

a) Are IAS increasing/decreasing in IPLC lands and waters?
b) Are IAS changing IPLC lands and waters, or their activities, laws and regulations, perceptions and beliefs, and/or cultural systems? If so, what changes have occurred or are occurring now?

Chapter 3: Drivers

a) What are main causes and drivers of IAS in IPLC lands and waters?
b) With IAS dynamics affected by many drivers (e.g., land use change, natural resource exploitation, climate change), do IPLCs recognise the main individual drivers of IAS, or are many drivers intertwined, and in what ways?

Chapter 4: Impacts

a) What are the impacts of IAS on IPLC communities, lands, waters?
b) Are there some IAS which IPLCs consider to have greater social and ecological impacts than others? How do they measure this impact? For example, the size of the area impacted, more people talking about it, the degree of common knowledge about IAS, their impact on certain activities including livelihood (hunting, fishing, agriculture), their impact on cultural traditions (specific totems/dreaming/law), involvement with studies, two-way knowledge.
c) When and under what conditions does the arrival of new IAS into the lives of IPLCs change their livelihoods and culture for the better or worse?

d) How and under what conditions do IPLCs incorporate and culturally adopt versus reject new IAS into their communities, in the context of their values or livelihoods?
e) Given all the other pressures on IPLCs (e.g., external population pressure, natural resource exploitation, climate change) and local ecology (e.g., land use changes, weather events, urbanization) are IPLCs able to identify the specific impacts of IAS on their community, or is it hard to discern between these and other impacts?
f) Are IAS making some of these other pressures more challenging?

Chapter 5: Prevention, management and adaptation

a) What are the situations in which IPLCs recognise the need to intervene in the context of managing or adapting to IAS?
b) How do IPLCs determine and implement approaches for responding to the impacts of IAS species on their communities, lands and waters?
c) How do IPLCs use their ILK in developing IAS management interventions?
d) What type of management programs do IPLCs think are most effective in their lands and waters, and in their own localities? Do they see any areas where one level of governance can help support the other, and how?
e) Do IPLCs want to collaborate with different knowledge systems to manage the issue of IAS and their impacts (for example two-way approach using ILK and science or other options), or do they want to manage the issue only within their communities?
f) What types of local cultural values do IPLCs use to manage IAS?

Chapter 6: Future options and policy

a) What future directions do IPLCs envision their communities taking with regard to IAS? For example, will IPLCs strive to mitigate the impacts of these species, to adapt to them, or to use them in harmony with other species?
b) How can these opportunities or channels to express the viewpoints of IPLCs be improved? How can IPLC participation be better integrated with national policies?
c) Are international efforts relevant to IPLC needs and ambitions?

2.4. Modalities of participation for IPLCs in the assessment process

2.4.1. Introduction

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

2.4.2. IPLCs in the assessment expert group

IPBES assessments include ILK experts (members of IPLCs who have knowledge about ILK and associated issues), and experts on ILK (persons who have knowledge about ILK and associated issues, who are not necessarily IPLCs).

2.4.3. Contributing authors

IPLCs can 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 will be listed as a contributing author only if their input is included in the final report.

2.4.4. Dialogue workshops

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

- The first dialogue, which discussed the early development of the assessment and key ILK questions for each chapter, was held on 15-16 November 2019 in Montreal, Canada;
- The second dialogue, which was held from 29 September to 1 October 2020, 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;
- A third dialogue, the subject of this report, was held on 1-3 February 2022, during the second external review period. The dialogue engaged IPLCs in critically reviewing the content of the draft chapters and SPM, to assess strengths, gaps, and provide recommendations for additional sources of information.

2.4.5. Online reviews of drafts of the assessment

IPLCs can also 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 IAS assessment author team, and review comments and responses are posted online after the session at which the Plenary accepts the 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.

The second order draft of the chapters and first order draft of the SPM of the IAS assessment were available for review between 15 December 2021 and 15 February 2022.

2.4.6. Call for contributions

An on-line call for contributions was launched for the IAS 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 IAS assessment process. Thirty contributions were received for the

IAS assessment, including community reports, academic papers, case studies, videos, songs and artwork. The call was made available in English, Spanish, French, Russian and Arabic.

2.4.7. Regular communications

The ILK and IAS TSUs 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 finalized.

2.5. Benefits to IPLCs of participating in the assessment

During previous workshops, participants noted that if IPLCs are 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 IAS impacts and management strategies;
- The opportunity for IPLCs to share and exchange experience and knowledge around IAS with scientists;
- Use of the final assessment 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 on IAS to the attention of policymakers and decision-makers.

3. Key recommendations and learning from the dialogue[5]

Over the course of the workshop, IPLC participants made comments and recommendations on the first order draft of the SPM, and the assessment, for consideration by assessment authors. The section below sets out the comments provided by the participants. To the extent possible, the text reflects what was said during the workshop by participants, with only minimal editing.

3.1. Overarching comments

A participant from the **Philippines** noted that since the second dialogue workshop, there is more information on ILK in the assessment and authors have captured the concerns of indigenous peoples.

A participant from **Mexico** noted that in general, the messages related to indigenous peoples in the assessment and SPM are powerful.

3.2. Section A. The problem: invasive alien species are a major and growing threat

After a brief presentation on Section A of the SPM, which describes the extent of the threat posed by IAS, participants discussed the drafts and provided the comments set out in the sub-sections below.

3.2.1. Perceptions of invasive alien species

Participants noted that it is important to pay attention to how IAS are perceived by IPLCs, as this may differ from scientific perceptions and may differ within communities. This will have an impact on how IAS are managed by IPLCs, and on how management strategies and polices are developed and implemented.

[5] 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.

A participant from the **United States (Hawai'i)** noted that "IAS" often seems to be an economically-driven term, driven by agriculture and tourism. Within this, IPLCs are then asked to respond to a scientist's point of view of invasive species, but this may not inherently be a shared perspective. IAS are very complex for IPLCs and the very concept of IAS is potentially problematic.

The participant from the **United States (Hawai'i)** noted that looking at the perspectives and worldviews around IAS management shows the complexity of the conversation around invasive species in IPLC communities. In terms of motivations for management of IAS by IPLCs, often many issues and motivations interact at the same time.

The participant from the **United States (Hawai'i)** also explained that it is important to highlight the diversity of practice and use around IAS across islands, within families and communities and between generations. Relational species/kinship species are very important in these considerations. There is also an impact on perception and use depending on higher historical and genealogical stories, about how certain species were introduced and by whom. For example, pigs in Hawai'i could be classified as IAS but they are crucial to contemporary subsistence and ceremonies.

A participant from the **Philippines** explained that for many IPLCs, IAS are not immediately judged as harmful unless proven detrimental to an ecosystem, e.g., golden kuhol (golden apple snail) in the paddy fields, *Chromolaena odorata* in banana farms, and *Lantana camara* in the pastureland. If proven harmful, these species are then considered as "pests" and IPLCs proceed to look for them and experiment on how to manage and control them. Moreover, some IAS are helpful in some areas but can be considered harmful and invasive in other areas. Examples include:

1. *Lantana camara* is being managed as fences or hedgerows and is considered beneficial in Mountain Province, Philippines but it is considered invasive and renders pastureland useless in the pasturelands of Kalinga, a neighbouring province.
2. *Chromoleana odorata* is a noxious weed, but when considered as material for green manure and compost, it becomes beneficial.

3.2.2. Impacts and gender

Participants noted that impacts of IAS can be different for women and men, as can responses to IAS and management of IAS.

A participant from the **United States (Hawai'i)** shared that in Hawai'i traditional dancing of hula is mostly done by women, who go into the forest to collect the plants needed. Because of IAS encroachment, these important native species are moving further up the mountains, or they are being outcompeted by IAS and disappearing. Also, IAS dominate the open areas, so more time is needed to tend open garden patches and there is less time to plant in these patches. In the ocean, women collect limpets, small-shelled molluscs, seaweed and *limu* (a general Polynesian term for edible plants living underwater), which is a big part of the diet, as it is used for seasoning fish. These are traditional food sources mostly collected by women. IAS take over habitats in intertidal areas, so women are forced to go out into the dangerous wash, wave areas and reefs to gather traditional foods.

A participant from **Mexico** explained that in Mexico there are many examples of gendered impacts of IAS. In many communities there are certain strategic resources which are used more by women then by men, which means that any negative impacts by IAS on those resources disproportionally affect women. As an example, eucalyptus forests eliminate all other plants, including small plants that are used as medicines. As a result, it is often impossible for women to access these plants in these areas, or they are forced to make greater efforts to find them. Fuelwood and water are two further examples of resources of critical importance to women. If existing sources of fuelwood and water are lost due to IAS, it is difficult to identify new sources, requiring significant efforts.

A participant from **India** shared that in some indigenous communities in Nagaland, India, weeding is undertaken by women. Where invasive alien weeds spread rapidly, the workload of women increases.

A participant from **Kenya** noted that women are keen observers of IAS. Women in Africa who gather medicinal plants notice damage to those plants by IAS, in different seasons. They can therefore play a very important role in gathering information about IAS and observing and monitoring IAS in different areas. They are also best placed to present matters related to IAS in traditional settings and to engage communities around IAS.

3.3. Section B. Global patterns and impacts: The intensification of anthropogenic drivers is leading to a worldwide increase in the presence of invasive alien species and their impacts

After a brief presentation on Section B of the SPM, which describes the global patterns and impacts of IAS, participants discussed the drafts and provided the comments set out in the sub-sections below.

3.3.1. Environmental degradation as a driver

Participants highlighted that land degradation and disturbance can lead to increased impacts from IAS.

A participant from **Canada** explained that for her indigenous community located outside of the city of Montreal, IAS are mainly driven by influences from the heavily urbanized area around the community. Phragmites are introduced to wetlands through filling and clearing activities taking place around the indigenous territories.

A participant from the **Philippines** noted that in the Cordillera, Philippines, IPLCs have been exchanging crops and animals between villages for a long time. However, they did not experience the introduction of IAS prior to the 1970s, in spite of the ongoing exchange of plants and animals. Only in the 1980s and 1990s did communities have to deal with IAS, some of which were introduced by governments. This could also be related to disturbance of ecosystems.

3.3.2. Government policy as a driver

Participants noted that often IAS seem to be a direct result of government policy, and that this should be explored as a driver.

A participant from the **Philippines** noted that most of the IAS in some regions have been caused by government policy and that this is important to explore in the assessment.

A participant from **Canada** noted that communities often have minimal control over land use changes taking place in their areas, in spite of the government's duty to consult, and that this can be a driver of IAS. Therefore, it is important for governments to fulfil the duty to consult.

3.3.3. Land rights as a driver

Participants highlighted that where IPLCs are not granted rights over their lands they often cannot effectively manage IAS, which becomes a driver of invasions.

A participant from **New Zealand** (**Aotearoa** in Māori) highlighted that threats to IPLC land and sea tenure are a major driver for IAS around the world. Acknowledgement of the rights of IPLCs is disregarded in many areas and many indigenous communities are fighting to protect their territorial integrity in numerous regions of the world. This all threatens IPLC guardianship of the world's biodiversity hotspots, leading to biodiversity loss and IAS increase.

A participant from **Mexico** noted that threats to IPLC land and sea tenure should be highlighted as a driver of IAS all over the world. The related issue of displacement of indigenous peoples from their lands and the impact of this problem on IAS is also very important.

3.4. Section C. The observed and potential impacts of invasive alien species can be prevented and addressed through management

After a brief presentation on Section C of the SPM, which describes management of IAS, participants discussed the drafts and provided the comments set out in the following sub-sections.

3.4.1. IAS management by IPLCs

Participants provided examples of ways in which IPLCs can manage IAS, and ways in which this could be supported and enhanced.

A participant from the **Philippines** explained that IPLCs can enrich their community processes and protocols to include the prevention of entry or proliferation of IAS. For example, in one village, in the late 1990s, an irrigation project from the government included a mandatory dispersal of seeds. The community, however, decided to request a woman to plant these seeds far away from the farm site for observation.

A participant from the **Philippines** also explained that collective actions or synchronized activities of indigenous peoples can be harnessed for effective management of IAS. For example, in the Philippines, during rice transplanting, people will start from the higher elevation going to the lower elevation. All planters consciously remove the golden apple snail, which significantly decreases its population, and as a result damage by the snail is insignificant. By the time the snails

multiply, the rice plants have grown and are no longer of interest to the snail. Also, in the mid-1980s, the Pidlisan people of Sagada, Mountain Province, experienced an invasion of rats in their farmlands, which damaged more than 50% of the expected yield. The elders analyzed the situation and decided that the expansion of rotational agricultural lands in the forest had reached a level that created an imbalance between forests and ricelands. They then declared some forestlands to be off-limits to rotational farming, in order to restore the habitats of the forests to restore the productivity of the ricelands.

A participant from the **United States (Hawai'i)** noted that communities learn from each other around management. For example, communities in South Africa have some traditions relating to *Prosopis* and communities in Hawai'i have been learning from this.

The reports back from the indigenous people's caucuses that took place during the workshop sessions recommended that IPLCs may need a system for communicating and documenting how to manage IAS, so that they can share different experiences in different communities and best practices for IPLCs to manage IAS, and also so that they can encourage each other and give support.

3.4.2. Spirituality

Participants emphasised the importance of spirituality in terms of decisions over how to adapt to or manage IAS.

A participant from **New Zealand** (**Aotearoa** in Māori) noted that literature reviews on management may suggest that only a small percentage of IPLC management of IAS is related to or motivated by spirituality. However, For IPLCs, spirituality underpins everything. However, often IPLCs do not report spirituality in studies. It therefore needs to be clear that results of literature reviews are based on what was reported in studies, and are not necessarily reflective of IPLC priorities in reality.

A participant from **Canada** highlighted that spirituality is the core value for IPLCs, and this should be highlighted as the basis for all rationality for IPLCs protecting their lands.

A participant from **Canada** also explained that there can be a moral dilemma for IPLCs related to management of IAS. Best practices for IAS often involve control using chemicals, which goes against the spiritual/moral connection that IPLCs have with the land. In Canada some communities are facing that dilemma now, especially with phragmites, as using chemicals in wetlands is generally considered to be the "best practice" for management. Some communities do not know how to move forward with this. They want to protect biodiversity, but without putting chemicals in habitats.

3.4.3. Adaptation and use of IAS

Participants discussed adaptation to IAS and how this may be more through necessity than choice, and that where uses of IAS have been found this does not always mean that such use should necessarily be classified as "positive".

A participant from **New Zealand** (**Aotearoa** in Māori) noted that the draft assessment suggests that many IPLCs faced with IAS will often adapt. It is important to highlight that often, IPLCs adapt

because they do not have any other option. They are not legally or financially supported to look after their territories and they need to have jobs to earn income, which takes up time and energy, and so they adapt because they have to. They do adapt well; they try to compare this to their ancient wisdom in relation to relatives and kinship relations. However, many IPLCs might have chosen eradication if they had the option and the resources required.

A participant from **Canada** also highlighted that sometimes adaptation is not an option in indigenous territories. Often control or management options (e.g., spraying with chemicals) will have impacts on other aspects of the natural world that are considered to be worse than learning to live with the species and dealing with the impacts. So IPLCs make the 'least worst' choice, which is to adapt. This is linked to the spiritual dilemma discussed above of managing invasive species using chemicals and affecting the other relationships in the natural world.

A participant from **Kenya** explained that *Opuntia* is colonizing landscapes in Laikipia North. It is mainly dispersed by humans, and also the seeds are resistant to digestion and are dispersed by elephants. It is colonizing land and brings great challenges and few advantages. It can be used to produce biogas, which is being done by one women's group, but very few people have that knowledge because no funding or support has been available. *Opuntia* fruit juice and jam is used by other groups, but many communities do not have the capacity for this either. It can also be used for fodder, but again, there is still not much capacity to really take advantage of this. Meanwhile, there are big disadvantages as *Opuntia* colonizes land and makes it less productive.

A participant from the **United States (Hawai'i)** explained that the removal of indigenous peoples from lands causes a forced need to adapt to a new area and to a new climate, and they are divorced from the ecological knowledge they have built up. Then IAS are added as an additional pressure – it is a complexity that communities recognize in Hawai'i. It motivates peoples' engagement to remove IAS, for example with pigs being removed from a conservation unit.

3.4.4. Safeguards for technological solutions

Participants discussed the need for safeguards around technological solutions to IAS.

A participant from **New Zealand** (**Aotearoa** in Māori) highlighted that there are ethical issues and a need for safeguards around genetic engineering, and that it is good that this is considered in the IAS assessment. With climate change and biodiversity loss there is an entire industry advocating for new technology. There needs to be a framework in place for considering new technologies, and indigenous peoples should have a meaningful role within that. For example, in New Zealand, indigenous peoples had to go to the High Court to have a voice regarding genetic engineering. Without safeguards in place, this issue may continue around the world.

3.4.5. Rights and management

Participants also drew attention to issues around recognition of indigenous rights, and how this impacts how IPLCs adapt to and manage IAS. This ties back to comments presented in section 3.3.3.

A participant from **New Zealand** (**Aotearoa** in Māori) noted that it is important to highlight the linkages between IAS management and indigenous peoples' rights. Many indigenous peoples do not have legal acknowledgement in national government legislation and therefore have ongoing

rights issues. Meanwhile miners, loggers and poachers come into their territories, and destroy biodiversity and introduce IAS. There is an important linkage between indigenous peoples' self-determination and tenure rights and how they can manage IAS.

3.5. Section D. Integrated governance and shared responsibilities may reduce the impacts of invasive alien species

After a brief presentation on Section D of the SPM, which describes integrated governance for IAS, participants discussed the drafts and provided the comments set out in the following sub-sections.

3.5.1. Communication between IPLCs, science and policy

Participants highlighted that there are crucial issues around communication between IPLCs, researchers and policymakers.

A participant from **Kenya** explained that in Africa, and Kenya in particular, even when IAS are discovered by a community in some remote areas, they often do not communicate with the government and they do not try to catalyze engagement and documentation by researchers. There are therefore gaps in policy and action because there are areas where communities live, and no researchers or government representatives go there. There need to be ways for connecting these groups to show policymakers that there are issues with IAS. Communities also need to be reached with information, to make sure that IPLCs are engaged and involved in the process. Another challenge for working with IPLCs around IAS is for local people to know the scientific names of IAS plants. Without this it can be hard to discuss IAS in the communities. There needs to be support for IPLCs on IAS. The assessment could showcase positive examples of where governments and researchers have been key players together with IPLCs.

During the reports back from the IPLC caucuses, it was also noted that IPLCs often only know species in local languages, so researchers need to find ways to bring these community names and scientific knowledge together, by working to document knowledge in local languages. Labelled pictures of species can also help link species with their scientific names, so that community knowledge of IAS can be shared with science.

A participant from **Botswana** explained that IPLCs have to engage with research institutions and engage researchers so that IAS can be analyzed and declared as invasive species before action may be taken. This slows down the process of adaptation and response. For example, umbrella thorn was always present in western Botswana, but now it is spreading rapidly in the west of Okavango delta, compromising the abundance of grass species, and dominating areas where pastoralists have already suffered severe losses due to droughts in 2014 and 2015, particularly due to limited grass species in the area. Goats can survive as they browse on this species, but people are scared for the future if this continues, as it brings severe challenges for the farming community. However, it is unlikely that concerted action will be taken until research groups draw attention to it, and then research may be done to eventually declare it as invasive.

A participant from the **United States (Hawai'i)** noted that she published a paper[6] with Native Hawaiian community members related to their process of working with government and non-profit organisations. The paper discusses land acknowledgements, which are common in North America and New Zealand, and how this can be a show of support rather than an action of support. It also discusses the pig issue in Hawai'i, which is complicated due to its relationship with Native Hawaiians. It also looks at how a holistic approach to incite change is needed when working intentionally with indigenous communities and their goals, including looking at communication gaps and overlaps between the needs and benefits of indigenous peoples and government agencies, because this can become confusing even in relation to native species management. Also, sometimes governments or agencies approach IPLCs informally for a casual conversation, rather than providing a proposal in writing that can be formally responded to. IPLCs need to be accorded the same respect and formalities that governments expect in return.

A participant from **Antigua and Barbuda** noted that for local communities, communication is very important to ensure that information does not only stay in meetings. In Antigua, the focus on environmental governance requires the inclusion of many stakeholders, including churches, politicians and teachers. Information from IPBES assessments is also relevant to people's daily lives, as on a small island everything is connected. In relation to IAS, the islands have lionfish and giant African snail, and there is a need for education and teaching because everyone has a role to play in their management.

3.5.2. Co-production and co-management

Participants discussed the ways in which co-production of knowledge and co-management of IAS could support community well-being and biodiversity.

A participant from **Botswana** highlighted that there has been a big gap between science and IPLC knowledge capital. Africa, in particular, has perceived development from a scientific perspective, and there was a paradigm shift from IPLC worldviews to a scientific view. In the process the IPLC knowledge-base was de-legitimized. However, science and ILK should be complementary.

The reports back from the IPLC caucuses noted that there is a need to encourage government, scientists and IPLCs to cooperate. Elders, priests, healers, youth and women are needed in these discussions. Co-management should be emphasized.

A participant from **Senegal** highlighted that integrated governance should be addressed in a transversal, systemic and intersectoral manner for each category of actor, and it should focus on the role of each actor in that governance. Initiatives of IPLCs are often not considered by governments, and ILK is not taken into account. This should be done, in a respectful manner, and governments should try to see how these knowledge systems could be considered alongside

[6] Kamelamela, Katie L. (2022) Kōkua aku, Kōkua mai: An Indigenous Consensus-driven and Place-based Approach to Community Led Dryland Restoration and Stewardship. *Forest Ecology and Management*, Volume 506, https://www.sciencedirect.com/science/article/pii/S0378112721010422

science when implementing management. Respectful integration, taking into account ILK, could achieve better local management and integrated management.

The participant from **Senegal** also gave an example of successful collaboration between local communities, researchers and government: There is a river in the north of Senegal that supplies drinking water, and *Typha* now covers 19-14% of the surface. Local communities of Senegal and Mauritania were impacted and they started to create management strategies, and researchers and governments subsequently joined them. This is therefore a very good example of co-producing and co-managing solutions at the local levels and across borders.

A participant from **Mexico** noted that indigenous peoples can support scientists, as often they may have common goals. There is a need for more information for IPLCs on methods to oppose projects proposed by governments that can bring in more IAS, for example tilapia. Also, indigenous peoples have their own methods for observation, but increasingly, because of climate change and other issues, they are not able to perform this monitoring. IAS are affecting biodiversity and ecosystem services on IPLC lands, and these affects are worse because of disparities in access to information, lands, funding and information.

3.5.3. Rights and recognition

Participants highlighted that recognition of indigenous rights can support efforts towards governance for IAS.

A participant from **Canada** noted that rights issues are critical, but within international processes they are often not highlighted enough. The lands around some communities in Quebec are being developed without proper consultation, as the duty to consult with indigenous peoples is misunderstood. These lands are then impacted by IAS. There is a negative feedback loop on the community as they lose access to traditional lands, the lands are impacted by IAS, and the community lose capacity to perform traditional activities on those lands. This continues to snowball, and is a significant driver for IAS. Policy documents therefore need to highlight the duty to consult and FPIC, as their implementation by governments is critical to preventing the incredible damage taking place on indigenous peoples' lands and territories, including due to IAS. Integrated governance would therefore require recognition of and respect for indigenous rights.

A participant from **Botswana** explained that indigenous peoples and marginalized groups in Botswana have been encouraged to assimilate to mainstream practices and ways of understanding the world and environment, and this can force a paradigm shift for IPLCs. Botswana voted in favour of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), but within the country there is a view that all people are indigenous. As a result, in Botswana, San (or Bushmen) are not identified as indigenous peoples, yet San people identify themselves this way and history shows that they are different, and their lives are different from the mainstream. However, if San try to gain recognition as indigenous peoples, there are concerns that this recognition will bring disunity. The result is that everyone is approached in the same way, which can make ILK invisible on the ground. For example, San knowledge and management of fire is often not recognised in programmes designed to combat wildfires. There is a need for local knowledge and local solutions, but first an open discussion about knowledge is needed to reduce misunderstandings and find complementarities. However, this is hard to achieve.

Indigenous peoples and scholars support this, and there are libraries full of knowledge, but policy systems are often not ready to take up the initiative. As a result, even if IPLCs know how they managed species traditionally, they still need to engage with researchers and to lobby policymakers, so that this knowledge can eventually be accepted and put into policy frameworks. To make progress there is a need for indigenous activists and indigenous research, and for non-indigenous people to do research and champion debates to make changes in decision-making processes.

A participant from **Mexico** highlighted that reinforcing indigenous peoples' rights, including FPIC, can help to ensure that indigenous peoples play a more active role in managing and controlling IAS. Because IAS often occur on their lands, indigenous peoples need to be part of decisions to manage and control IAS, and many indigenous peoples want to preserve the Earth and natural beings.

3.5.4. Stakeholders and IPLCs

Following the discussion on rights, participants discussed how they could be represented in the assessment in relation to the term "stakeholders".

A participant from **Bolivia** noted that indigenous peoples would consider themselves as "rights holders" rather than "stakeholders". Stakeholders might include women, youth and other actors. But IPLCs, particularly indigenous peoples, engage with ILK as rights holders over lands and territories, from a human rights approach, using UNDRIP. This needs to be considered throughout the assessment and SPM.

A participant from **New Zealand** (**Aotearoa** in Māori) also highlighted that indigenous peoples have identified themselves as "knowledge holders" or "rights holders" in other fora. A "stakeholder" could be any member of the public that feels impacted in some way. Indigenous peoples meanwhile identify as separate to that, and it is therefore of concern to see indigenous peoples included only as stakeholders. If indigenous peoples cannot be termed as "rights holders", then the wording "stakeholders and IPLCs" is preferable to "stakeholders, including IPLCs".

A participant from **Canada** noted that there is an important distinction between stakeholders and holders of rights, and consultation with indigenous peoples on traditional territories is vital. This is a challenge that IPLCs are facing at all levels.

3.5.5. Biocultural community protocols

Participants highlighted the importance of biocultural community protocols (BCPs), and how these could support governance around IAS.

A participant from **Mexico** explained that, for IPLCs, a BCP is a document that establishes a community or region's "rules of the house" for outside actors such as governments and business. This is based on the rights recognized at the international and national levels and on the rules inside the community. BCPs regulate projects that can cause any damage to the land, resources, natural cultural or bicultural patrimony in the community (e.g., biofuel, monoculture or tilapia farms), and they reinforce the recognition and importance of native species - this can link also to

IAS. In Oaxaca, there has been an important achievement with local-level government, as BCPs are now in the constitution as an indigenous right.

A participant from **Kenya** explained that BCPs emerged out of discussions around the development of the Nagoya Protocol, and a number of BCPs were developed in Latin America and Africa. BCPs can be very important for IPLCs to help them manage their knowledge and relationships with governments and other entities, and they also bring in and support traditional institutions. Communities also need to work with governments on their development. Many IPLCs strongly believe in the importance of this process. Once completed and validated, BCPs can be sent to the clearing house programme of the Convention on Biological Diversity (CBD). In this way, governments are able to find and refer to the BCPs. The business community and other stakeholders who are interested in species and resources can also be informed by the BCPs. These actors can then connect with IPLCs with a clear idea of what is possible within an area.

A participant from the **Philippines** highlighted that a key aspect of BCPs is respect for customary governance. On the issue of governments introducing IAS, it is important that government and other actors respect customary governance in territories of indigenous peoples. This means that it is important that indigenous peoples are informed of the species that are being introduced, as often these are introduced with the intention of being beneficial, but they may later become invasive.

A participant from **Argentina** recommended that the IAS assessment and IPBES could recommend support for IPLCs to develop BCPs. The importance of having dialogues of knowledge systems is well recognised, but at the same time ILK is not protected so it can be difficult to have dialogues, as IPLCs worry about misappropriation of their knowledge. Support for BCP development will contribute to IPLCs and scientists developing new knowledge together, and to IPLCs developing knowledge collectively.

A participant from **Panama** also highlighted that BCPs are very important as they facilitate the process of carrying out work between institutions, governments and indigenous peoples. Often there are assumptions that indigenous peoples are opposed to many conservation and research activities, but in fact indigenous peoples are often concerned about the right to protect and ensure their rights. BCPs have been worked on considerably with respect to genetic resources and also in the context of REDD+.[7] The participant recommended that IPBES could look into this topic in greater detail, including developing principles around the different components of the protocols, as this could help to drive processes and orient them regarding the sharing of knowledge, and could also help to harmonise protocols between different countries. This would give more credibility to the work of indigenous peoples, governments and institutions. This could also be taken on by other conventions, where there has been progress, but not as much as indigenous peoples would like (e.g., around the climate process).

[7] REDD+ is a framework created by the UNFCCC Conference of the Parties to guide activities in the forest sector that reduces emissions from deforestation and forest degradation, as well as the sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries.

During the reports back from the IPLC caucuses, it was noted that communities could work on BCPs and other knowledge management systems, so they gain mutual agreement of what knowledge to share and how, and how they want to approach FPIC.

3.5.6. Capacity-building and benefit sharing

Participants emphasised that benefit sharing and capacity development should be integral considerations for any proposals to work with IPLCs around IAS.

A participant from **Australia** explained that for community research practices in the north of Australia, FPIC is key, as is observing and abiding by communities' cultural protocols, whether these are written or not. Also crucial is the area of capacity-building for IPLCs, and looking at community benefits from working with researchers. Quite often, at least in Australia, researchers do not have money to pay, but benefits to communities do not always have to be financial, and they can also be in the form of learning opportunities provided to communities. Many communities are interested in learning how to do research themselves, and in building skills in their organisations and rangers' groups, so that they can do their own work in a way that will meet the requirements and rigour of scientific research, so that when they report their findings they are taken seriously. Another example is the Local Biodiversity Outlook reports, where communities write their own reports, and these are peer reviewed and critically analysed. In Australia, IPLCs are also engaged and involved in biosecurity, so those skills might allow Aboriginal people to work, including beach works (due to the large number of ships that go through the Great Barrier Reef and the items that get washed up on the beaches), and working with quarantine and customs. This is something that has been encouraged by indigenous peoples in Australia. Some Pacific Islands have also been encouraging these kind of benefits and skills for communities, for example through the policy on IAS of the Secretariat of the Pacific Regional Environment Programme (SPREP).

A participant from **Kenya** highlighted that capacity-building is essential for IPLCs, on how to document, compile and share information. There is also need for an expert group of IPLCs to continue working on IAS so they can bring this issue to the top of agendas when they meet scientists.

During the reports back from the IPLC caucuses, it was noted that IPLC researchers are needed to bridge between ILK and science, and there should be capacity-building so they can work in this field and manage indigenous data.

A participant from **Mexico** noted that capacity-building is needed with IPLCs on early warning about the IAS impacts to IPLC lands.

A participant from the **United States (Hawai'i)** noted that community compensation is also crucially important – not just financial support for management, but also financial support for IPLCs to be fully involved in decision-making processes, so that they do not also have to compromise their family's wellbeing due to loss of income. Implementation of participatory mechanisms without appropriate budget makes it difficult for IPLCs to engage.

3.5.7. Data management and technology

Participants noted issues around technology and data.

A participant from **Bolivia** noted that the CARE (Collective Benefit, Authority to Control, Responsibility, and Ethics) principles related to ILK and databases and data management are important. He recommended that the assessment could also quote Article 31 from the UNDRIP. It includes text on controlling and protecting ILK, and also intellectual property, which is key to IPLC control over their knowledge.

A participant from **New Zealand** (**Aotearoa** in Māori) noted that in terms of data management there are also issues in the Pacific region around technological transfer to IPLC communities, such as the use of artificial intelligence etc. for monitoring and restoration.

3.5.8. Transformative change

A participant from **New Zealand** (**Aotearoa** in Māori) noted that transformative change for Pacific indigenous peoples is articulated in proverbs and ceremonies. For example, “Titiro atu ki te taumata o te moana... tākiri ko te ata.” “Look beyond to the configurations on the horizon... for the breaking of a new dawn.” This was often expressed when Māori had serious challenges that they were seeking to overcome.

4. Next steps

The following steps took place after the dialogue workshop:

- Follow-up calls and emails were carried out where needed for participants who did not have enough time during the workshop or who could not be heard due to connection problems.
- A document compiling comments from the dialogue workshop was developed for the assessment review process. The draft comments were sent to all participants for their edits and additions by 14 February 2022. After edits, and as there were no objections, the comments were submitted through the external review process on 15 February 2022.
- Participants were invited to personally participate in the review of the IAS assessment that ran from 15 December 2021 until 15 February 2022. Participants were invited to contact the IPBES TSU on ILK for any assistance (e.g., the IPBES TSU could send a version of the chapter drafts in which the sections on ILK and IPLCs were highlighted, help with translation from French and Spanish, or with inputting comments into the formal review sheets).
- A report from the dialogue workshop (this report) was developed. The draft report was sent to all participants for their edits, additions and/or approval before being finalised.

5. Annexes

Annex 1: Agenda

Regional sessions		
Hour	**Duration**	**Session**
1st hour	5 mins	Welcome
	10 mins	Objectives of the workshop, FPIC
	5 mins	IPBES and ILK
	10 mins	Introduction to the assessment
	15 mins	Discussion and reflections about the overall assessment
	5 mins	Overview of the draft key messages in the summary for policymakers (SPM) Section A of the SPM – presentation of ILK related Key Messages
	5 mins	Section B of the SPM – presentation of ILK related Key Messages
2nd hour	15 mins	Comments and reflections on section A and B of the SPM
	5 mins	Section C of the SPM – presentation of ILK related Key Messages
	15 mins	Discussion and reflections about section C of the SPM
	10 mins	Break (10 mins)
	5 mins	Section D of the SPM – presentation of ILK related Key Messages
	15 mins	Discussion and reflections about section D of the SPM
3rd hour	25 mins	IPLC caucus
	25 mins	Feedback from caucus Discussion: Overarching issues / Feedback on the workshop
	5 mins	Next steps (follow up, report, review comments, future steps)
	5 mins	Closing

Plenary session		
Hour	**Duration**	**Session**
1st hour	20 mins	Welcome and aims of session
	40 mins	Reports of the discussions in the different regional sessions
2nd hour	30 mins	Discussion: Overarching issues, key messages
	10 mins	Feedback on the workshop
	10 mins	Next steps (follow up, report, review comments, future steps)
	10 mins	Closing

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 invasive alien species

Online, 1-3 February 2022

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 perspectives on invasive alien species (IAS). 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.

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		
Name	**Country**	**Affiliation**
Adija Adamu	Cameroon	Adamu Adija, coordinator of African Indigenous Women's Organization-Southern Africa chapter
Ramiro Batzin	Guatemala	Co-chair of the International Indigenous Forum on Biodiversity; Director General of Asociacion Sotz'il
Laila Öberg Ben Ammar	Sweden	Executive officer in community planning for Sami Parliament
Q"apaj Conde	Bolivia	Convention on Biological Diversity
Florence Daguitan	Philippines	Tebtebba Foundation
Viviana Figueroa	Argentina	IPBES Task Force on Indigenous and Local Knowledge / Indigenous Women's Network on Biodiversity
Chrissy Grant	Australia	Jabalbina Yalanji Aboriginal Corporation
Joann Guiliao	Philippines	Partners for Indigenous Knowledge Philippines
Guadalupe Yesenia Hernández Márquez	Mexico	ILK focal point for IPBES in Mexico
Lynn Jacobs	Canada	Director of Environmental Protection, Mohawk Council of Kahnawà:ke
Kamal Kumar Rai	Nepal	IPBES Task Force on Indigenous and Local Knowledge / Society for Wetland Biodiversity Conservation
Katie Kamelamela	USA / Hawai'i	Akaka Foundation for Tropical Forests
Ransom Karmushu	Kenya	Laikipia Maasai Community
Naiyan Kiplagat	Kenya	Paran Women Group
Thingreiphi Lungharwo	India	Naga Peoples Movement for Human Rights (NPMHR)
Kalicharan Marandi	India	Kalicharan Marandi from mainland India who is with an organization called JANA VIKAS from Odisha state.
Onel Masardule	Panama	Executive Director of the non-profit Foundation for the Promotion of Indigenous Knowledge (FPCI) in Panama
Huihui Kanahele Mossman	USA / Hawai'i	Associate Director at Kipuka Native Hawaiian students svc.
Lucy Mulenkei	Kenya	Co-chair of the International Indigenous Forum on Biodiversity; Executive Director of the Indigenous Information Network
Sharon Naini	Kenya	Nyekweri Kimintet Community Forest Conservation Trust
Faith Natoya	Kenya	Indigenous community member
Maria Elena Regpala	Philippines	Partners for Indigenous Knowledge Philippines
N'diaga Sall	Senegal	Coordinator of Enda Santé
Gakemotho Satau	Botswana	Bugakhwe (San), TOCaDI (Trust for Okavango Cultural and Development Initiative)
Tui Shortland	New Zealand - Aotearoa	Director of Te Kopu Pacific Indigenous and Local Knowledge Centre of Distinction
Ruth Spencer	Antigua	Coordinator: Training, outreach and resource mobilization of the Freetown Community Group/Caribbean Marine Managed Areas Network
Prasert Trakansuphakon	Thailand	Pgakenyau Association for Sustainable Development (PASD)

Assessment authors		
Helen Roy	UK	Co-chair of the assessment / Chapter 1
Peter Stoett	Canada	Co-chair of the assessment / Chapter 1
Sebataolo Rahlao	South Africa	Chapter 2
Hanieh Saeedi	Iran	Chapter 2
Ankila Hiremath	India	Chapter 4
Makihiko Ikegami	Japan	Chapter 4
Ellen Ryan-Colton	Australia	Chapter 4
Chika Egawa	Japan	Chapter 5
Evangelina Schwindt	Argentina	Chapter 5
Bridget Bwalya Umar	Zambia	Chapter 6
Patricia Howard	UK	Chapter 6
Stanislav Ksenofontov	Russia	Chapter 6
Betty Rono	Kenya	Chapter 6
Bharat Shrestha	Nepal	Chapter 6

IPBES		
Ana María Hernández Salgar	Colombia	Chair of IPBES / Co-chair of the IPBES task force on ILK
Adriana Flores	Mexico	Co-chair of the task force on ILK
Tanara Renard	France	Technical support unit for the IAS assessment
Noriko Moriwake	Japan	Technical support unit for the IAS assessment
Peter Bates	UK	Technical support unit for ILK