



**Plenary of the Intergovernmental Science-Policy
Platform on Biodiversity and Ecosystem Services
Seventh session**

Paris, 29 April–4 May 2019

Item 5 of the provisional agenda*

**Report of the Executive Secretary on the implementation
of the first work programme for the period 2014–2018****Information on work related to indigenous and local knowledge
systems****Note by the secretariat****Introduction**

1. In section II of its decision IPBES-2/5, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) established the task force on indigenous and local knowledge systems for the period 2014–2018 for the implementation of deliverable 1 (c) of the work programme, concerning procedures for and approaches to working with indigenous and local knowledge systems.¹
2. In its decision IPBES-5/1, the Plenary approved the approach to recognizing and working with indigenous and local knowledge (hereinafter referred to as the IPBES approach to indigenous and local knowledge) set out in annex II to the decision; requested the Multidisciplinary Expert Panel, supported by the task force on indigenous and local knowledge, to implement it; and requested the Executive Secretary to make the arrangements necessary to implement the approach, including arrangements for the establishment of the participatory mechanism, subject to the availability of resources.
3. In the same decision, the Plenary invited indigenous peoples and local communities and their representatives, as well as experts on indigenous and local knowledge, to engage in the activities described in the IPBES approach to indigenous and local knowledge, in particular through the participatory mechanism, and invited Governments, stakeholders, strategic partners and others to support activities mobilizing indigenous and local knowledge where such knowledge was needed.
4. In section III of its decision IPBES-6/1, the Plenary welcomed the progress made by the Multidisciplinary Expert Panel, supported by the task force, in implementing the IPBES approach to indigenous and local knowledge as well as the efforts of indigenous peoples and local communities and partner organizations in support of the IPBES approach to indigenous and local knowledge, and invited other indigenous peoples and local communities and organizations to join those efforts.
5. In the same decision, the Plenary requested the Executive Secretary, working with the Multidisciplinary Expert Panel and supported by the task force, to undertake a process of consultation, in partnership with indigenous peoples and local communities, on the application of the participatory

* IPBES/7/1/Rev.1.

¹ Further details are provided in the terms of reference for the task force, set out in annex IV to decision IPBES-2/5.

mechanism, and to continue implementing the IPBES approach to indigenous and local knowledge and report to the Plenary at its seventh session on further progress in that regard.

6. Information on the activities of the task force on indigenous and local knowledge is set out in the report of the Executive Secretary on the implementation of the first work programme for the period 2014–2018 (IPBES/7/2). The annex to the present note, which is presented without formal editing, sets out further information on activities carried out by the task force on indigenous and local knowledge in addressing its mandate. It also sets out activities that a task force on indigenous and local knowledge could undertake as part of the next work programme of IPBES.

Annex

Information on work related to indigenous and local knowledge

I. Membership of the task force

1. The task force on indigenous and local knowledge consists of the following members:

<i>Name</i>	<i>Country</i>	<i>Function</i>
Judy Fisher	Australia	Member of the Multidisciplinary Expert Panel and co-chair of the task force
Madhav Karki	Nepal	Member of the Multidisciplinary Expert Panel and co-chair of the task force
Alfred Apau Oteng Yeboah	Ghana	Bureau member
Ana María Hernández Salgar	Colombia	Bureau member
Mariteuw Chimère Diaw	Cameroon	Member of the Multidisciplinary Expert Panel
Özden Görücü	Turkey	Member of the Multidisciplinary Expert Panel
Mohammed Sghir Taleb	Morocco	Member of the Multidisciplinary Expert Panel
Çiğdem Adem	Turkey	Expert
Constant Yao Yves Adou	Ivory Coast	Expert
Wilfredo Alangui	Philippines	Expert
Fikret Berkes	Canada	Expert
Eduardo Sonnewend Brondizio	Brazil	Expert
Maria Manuela Carneiro Da Cunha	Brazil	Expert
Viviana Elsa Figueroa	Argentina	Expert
Rosemary Hill	Australia	Expert
Kaoru Ichikawa	Japan	Expert
Peris Kariuki	Kenya	Expert
Zsolt Molnár	Hungary	Expert
Hassan Roba	Kenya	Expert
Marie Roué	France	Expert
Yildiz Aumeeruddy Thomas	Mauritius	Expert
Dayuan Xue	China	Expert

2. In accordance with the terms of reference for the task force, the co-chairs also invited resource persons to participate in the meetings of the task force, following consultation with the Bureau, including a representative of the Centres of Distinction on Indigenous and Local Knowledge.

3. The work of the task force has been supported by the technical support unit located at United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, France. The unit was established on 3 November 2015 and is funded by IPBES and a matching in-kind contribution by UNESCO.

II. Seventh meeting of the task force on indigenous and local knowledge

4. The seventh meeting of the task force was held from 26 to 28 September 2018 in Paris, France, hosted by UNESCO.

5. The seventh meeting of the task force was held in conjunction with other meetings. From 24 to 25 September 2018, an indigenous peoples' consultation on the participatory mechanism was held at the same venue. The third meeting of the IPBES capacity-building forum, which had a focus on indigenous and local knowledge, was organized jointly with the task force on capacity-building on 25 and 26 September 2018. The aim was for the two prior meetings to inform the work of the task force on indigenous and local knowledge.

6. The reports on the meeting of the task force on indigenous and local knowledge and the indigenous peoples' consultation are contained in the annexes to this document. Information on the capacity-building forum is contained in document IPBES/7/INF/7.

7. The seventh meeting of the task force resulted in the following outcomes, which are further described in the sections below:

(a) Further development of the methodological guidance for recognizing and working with indigenous and local knowledge (see section III A);

(b) Further development and refinement of processes for a participatory mechanism addressing each stage of the assessment cycle (see section III B);

(c) A proposal regarding composition of a revised task force on indigenous and local knowledge for the next work programme. This proposal recommended that the revised task force include:

- (i) 7 indigenous and local knowledge experts or indigenous and local knowledge holders (and their alternates) from the seven socio-cultural regions designated under the United Nations Permanent Forum on Indigenous Issues;
- (ii) 5 strategic partner organisations affiliated with or working with indigenous and local knowledge or indigenous peoples and local communities, each represented by a resource person;
- (iii) IPBES experts, including members of indigenous and local knowledge liaison groups from IPBES assessments, and members of task forces and expert groups within IPBES; and
- (iv) 2 representatives of the Bureau and Multidisciplinary Expert Panel.

8. The proposal regarding the structure of a revised task force was presented to the Multidisciplinary Expert Panel and the Bureau at their twelfth meetings, and the Multidisciplinary Expert Panel and the Bureau adjusted the proposal before including it as part of the modalities for the draft next work programme.

9. The full report of the task force on indigenous and local knowledge on its seventh meeting, including a list of participants, is set out in appendix I to this document.

III. Indigenous peoples' consultation on the participatory mechanism

10. The indigenous peoples' consultation on the participatory mechanism was held on 24 and 25 September 2018, in response to decision IPBES-6/1, section III, in which the Plenary requested the Executive Secretary, working with the Multidisciplinary Expert Panel and supported by the task force, to undertake a consultation process, in partnership with indigenous peoples and local communities, on the application of the participatory mechanism. The meeting was funded by the IPBES trust fund (capacity-building budget), with additional funding generously provided by the Institute for Global Environmental Strategies, Japan.

11. Participants of the consultation also attended the second day of the capacity-building forum on 26 September 2018, as well as a day of discussions on the capacity-building rolling plan on 27 September 2018. Two participants of the consultation also attended the meeting of the task force on indigenous and local knowledge on 27 and 28 September 2018.

12. Participants made the following recommendations on the participatory mechanism and methods for working with indigenous and local knowledge:

(a) Monitoring and reporting on engagement by indigenous peoples and local communities should take place at each stage of the IPBES assessment cycle and where appropriate in other IPBES activities, including success rates for becoming authors on IPBES assessments and response rates to online calls;

(b) The assessment cycle, and other IPBES work-streams, should be designed in such a way that indigenous peoples and local communities have opportunities for direct interaction at each of the key stages. Face to face participation is likely to be more productive and representative than relying on online or web portal contributions;

(c) Indigenous and local knowledge experts should be included in assessment author groups. The current rules for 80% of experts to be selected from among government nominations may need to be addressed in order to facilitate participation of indigenous peoples and local communities, potentially through a separate nomination and selection process that accounts for indigenous and local knowledge and experience (which may not be reflected, for example, in a record of peer-reviewed publications);

(d) Key findings from assessments should be presented back to communities, and products of specific use to indigenous peoples and local communities should be developed from completed assessments, noting that this will need to be done by other organisations;

(e) Policy options or guidelines should be produced from completed assessments for Governments on working with indigenous peoples and local communities, noting that this cannot be done by the IPBES secretariat but will need to be done by other organisations;

(a) Self-organized networks of indigenous peoples and local communities, such as the International Indigenous Forum on Biodiversity and Ecosystem Services (IIFBES), should be the main mechanism for participation and organization of indigenous peoples and local communities;

(f) Indigenous peoples and local communities should be included on the revised task force, as both indigenous and local knowledge experts and as strategic partners, to guide and monitor the participatory mechanism, to provide links to global networks of indigenous peoples and local communities, and to represent different regions.

13. Participants recognized that IPBES is a leader in working with indigenous and local knowledge and noted that other international organizations and agencies are watching the progress of IPBES to learn lessons. They noted that IPBES could influence and provide valuable lessons for other multilateral processes.

14. These recommendations and observations were subsequently considered by the capacity-building forum and the task force on indigenous and local knowledge. Resulting progress on the participatory mechanism and methodological guidance is further discussed below in sections III A and III B below.

15. The full report on the indigenous peoples' consultation on the participatory mechanism, including a participants list, is contained in appendix II of this document.

III. Implementation of the approach to recognizing and working with indigenous and local knowledge

A. Methodological guidance for recognizing and working with indigenous and local knowledge

16. The task force on indigenous and local knowledge, at its sixth meeting held in Pereira, Colombia, from 8 to 11 May 2017, agreed that further methodological guidance was needed to operationalize the requirements of the IPBES approach to indigenous and local knowledge, including on how to work with free prior and informed consent (FPIC) principles.

17. The resulting "methodological guidance for recognizing and working with indigenous and local knowledge in IPBES assessments" is intended as a resource for co-chairs, authors and technical support units working on IPBES assessments. It is also intended as a resource for indigenous peoples and local communities wanting to understand how they can participate in IPBES assessment processes. The guidance also aims to provide a framework to participate throughout the assessment cycle, and therefore contributes to the participatory mechanism. It also contributes to IPBES' other three functions (knowledge and data, policy support tools and methodologies, and capacity-building).

18. Development of the methodological guidance was a key priority of the task force at its seventh meeting. As preparation for the meeting, the technical support unit, on behalf of the task force, requested inputs from authors of previous and on-going assessments (including the four regional assessments of biodiversity and ecosystem services, the assessment of land degradation and restoration and the global assessment), looking at strengths and weaknesses of the methodologies employed. These inputs were used to develop a draft of the methodological guidance. Documents developed to frame the work of the global assessment were also reviewed and adapted to form the draft methodological guidance.

19. At its seventh meeting, the task force further reviewed and developed the draft methodological guidance, building also on information and recommendations received from the indigenous peoples' consultation on the participatory mechanism.

20. The Multidisciplinary Expert Panel and the Bureau, at their twelfth meetings (October 2018), were invited to review the revised draft. They were also asked to provide written comments on a version of the draft revised after the meetings. Members of the task force supported by the technical support unit worked with global assessment authors to finalize the guidance in line with the comments received. The latest draft of the guidance was circulated to the Multidisciplinary Expert Panel and

Bureau for their information, with the understanding that the guidance, which would continue to evolve, would be further considered by the Panel and the Bureau at their next meeting.

21. A draft was provided as a resource for the assessments on values and the assessment on the sustainable use of wild species at their first author meetings.
22. The methodological guidance includes the following sections:
 - (a) A brief introduction explaining the aims of the guidance, and a brief introduction to the participatory mechanism;
 - (b) A review of how to work with free prior and informed consent (FPIC) in the context of IPBES assessments;
 - (c) A table outlining methods and participation activities at all stages of the assessment cycle;
 - (d) The formation of author groups for working with indigenous and local knowledge, including the indigenous and local knowledge liaison group, and how the gap filling mechanism and calls for contributing authors can be used to bring more indigenous and local knowledge expertise into an assessment;
 - (e) The development of key questions on indigenous and local knowledge for each assessment chapter, and the use of a dialogue workshop to engage indigenous peoples and local communities in this activity;
 - (f) Methods for mobilizing data, information and knowledge, including online surveys, calls for contributions, systematic literature reviews; and face-to-face dialogues with representatives of indigenous peoples and local communities;
 - (g) Writing an assessment that includes critical aspects of indigenous and local knowledge and practice, including methods for presenting indigenous and local knowledge in assessment texts;
 - (h) Methods for engaging indigenous peoples and local communities in reviews of assessment drafts;
 - (i) Outreach and work with indigenous peoples and local communities on post-assessment processes.
23. The latest draft of the methodological guidance is provided in appendix III. It represents a work in progress that will be considered further by the Multidisciplinary Expert Panel and the Bureau at their next meeting and will continue to evolve as new assessments further develop methods for engaging with indigenous peoples and local communities and indigenous and local knowledge.
24. Other methodological tools of note include a database of literature and materials on indigenous and local knowledge developed from literature and materials compiled during the global assessment and previous assessments which has now been made available to authors of the new IPBES assessments, and which can be further developed by the authors of these assessments.

B. Further development of the participatory mechanism

25. The participatory mechanism is part of the IPBES indigenous and local knowledge approach as set out in annex II to decision IPBES-5/1. Its objective is to facilitate the effective and meaningful engagement of indigenous and local knowledge holders, indigenous and local knowledge experts and their organizations or networks in order to strengthen their ability to contribute to and benefit from IPBES. It achieves its objective by performing, inter alia, the following types of activities:
 - (a) Providing a *web-based platform* to facilitate the effective and meaningful engagement of existing networks of indigenous peoples and local communities and relevant experts and allowing new, preferably self-organizing, networks to develop;
 - (b) Promoting, through *consultations*, a dialogue with various networks, relevant experts and policymakers to mobilize inputs and disseminate results during all four phases of the assessment process, including both web-based consultations and face to face dialogue workshops;
 - (c) Creating opportunities for shared learning and exchange through dedicated *discussion forums* on the web-based platform or in the context of the contribution to and use of the catalogue of policy support tools and methodologies; and
 - (d) Supporting IPBES, by means of *strategic partnerships*, in promoting and catalysing activities by appropriate partners that build the capacity of indigenous peoples and local communities

to engage effectively and meaningfully in IPBES and that mobilize indigenous and local knowledge in formats accessible to IPBES when such knowledge is missing.

26. The task force, during its sixth meeting held in Pereira, Colombia, from 8 to 12 May 2017, proposed a series of priorities to implement the four types of activities (see previous paragraph) that were presented to but not approved by the Multidisciplinary Expert Panel and Bureau at their ninth meetings. The priorities included:

- (a) Support the IPBES work programme by linking with other organizations to build capacity of indigenous peoples and local communities to engage in IPBES processes;
- (b) Mobilize indigenous and local knowledge in formats accessible to IPBES;
- (c) Ensure that processes are in place for giving back to indigenous peoples and local communities through sharing knowledge and insights gained through assessments;
- (d) Promote dialogue with various networks, relevant experts and policymakers to allow participation in all four phases of the assessment process, including both web-based consultations and dialogue workshops;
- (e) Assist in the development of policy support tools and methodologies which have special reference and/or significance to indigenous peoples and local communities;
- (f) Create opportunities for shared learning through dedicated discussion forums on the web-based platform and/or face-to face meetings as appropriate.

27. Various initiatives that are in line with the four types of activities and the task force's proposed priorities are already taking place within the work of IPBES, particularly within the global assessment. The task force saw a need for further refinement, elaboration and coordination, as well as for an analysis of gaps in relation to the participatory mechanism's objectives and the priorities it identified.

28. As preparation for the 7th task force meeting and the indigenous peoples' consultation on the participatory mechanism, the task force, supported by its technical support unit, examined and compiled lessons learned from previous and on-going assessments, looking at processes that were used for knowledge mobilization, indigenous and local knowledge engagement activities and post-assessment knowledge-policy processes, including dialogues and consultations. Based on this information, the participants in the indigenous peoples' consultation discussed strengths, weaknesses, gaps and potential partners that could support the further development of participation in IPBES processes.

29. The task force, at its 7th meeting, considered the background information on participatory activities together with the proposals resulting from the indigenous peoples' consultation and the discussions at the capacity building forum. The task force on indigenous and local knowledge developed a plan for participatory activities at each stage of the assessment process, which now form a table of activities in section 4.1 of the methodological guidance (see appendix III.). The task force also developed a budget for activities related to indigenous and local knowledge for an assessment, which was proposed to the Multidisciplinary Expert Panel and the Bureau at their twelfth sessions. The final recommended budget is set out in appendix IV and reflected in the budget for 2019 and 2020 (document IPBES/7/4).

C. The indigenous and local knowledge approach in the global assessment

30. After the approval of the IPBES approach to indigenous and local knowledge, a liaison group on indigenous and local knowledge was formed as part of the IPBES global assessment of biodiversity and ecosystem services, which devised steps to implement the approach within the assessment. Activities included a series of dialogues workshops and an on-line call for contributions. Progress on these activities was reported to the Plenary at its sixth session.

31. Additional activities since the sixth session of the Plenary include the following dialogues and outreach activities:

- (a) A statement in the plenary and a side event at the **17th session of the United Nations Permanent Forum on Indigenous Issues** (New York, United States, 19 and 20 April, 2018);
- (b) IPBES global assessment author engagement in the **Action Group on Knowledge Systems and Indicators of Wellbeing** (New York, United States, 21 and 22 April 2018);
- (c) A knowledge café on indigenous and local knowledge and the global assessment at the **IUCN Communities, Conservation & Livelihoods Symposium** (Halifax, Canada, 28 to 30 May

2018). Global assessment authors discussed the global assessment in relation to conservation, protected areas and indigenous peoples;

(d) **An IPBES Global Assessment Arctic Indigenous Knowledge Dialogue** (Helsinki, Finland, 6 to 8 June 2018). This 3-day dialogue was organised by the University of Helsinki specifically to engage with indigenous peoples from around the Arctic region about indigenous and local knowledge inclusion in the global assessment and as part of the second review of a draft of the assessment;

(e) Global assessment author participation in the **16th Congress of the International Society of Ethnobiology** (Belém, Brazil, 7 to 10 August 2018), including: a panel session on the contributions of indigenous peoples and local communities to the Aichi Biodiversity Targets, and overarching discussions on the participation of indigenous peoples and local communities in IPBES work; a plenary session on ‘global change, local perceptions and issues’ coordinated by E. Brondizio; and an open session on the Brazilian assessment of the contributions of indigenous peoples and local communities to biodiversity and conservation.

D. The indigenous and local knowledge approach in the assessments regarding diverse conceptualisations of the multiple values of nature and its benefits, and of the sustainable use of wild species

32. In line with the IPBES approach to indigenous and local knowledge and the draft methodological guidance, liaison groups on indigenous and local knowledge were formed for the assessment regarding diverse conceptualizations of the multiple values of nature and its benefits (the values assessment) and of the sustainable use of wild species (the sustainable use assessment) during their first author meetings. These liaison groups then worked on a series of activities, including:

(a) Developing key questions relating to indigenous and local knowledge for each chapter of their respective assessments, to focus work on indigenous and local knowledge and develop a narrative that will run through each assessment;

(b) Developing a call for contributions on indigenous and local knowledge that will be launched by the IPBES secretariat in English, French and Spanish, which will aim to gather materials, experts and organisations relevant to the assessments; these materials will be added to the existing database of indigenous and local knowledge literature that was created during the global assessment;

(c) Members of the liaison groups will participate in indigenous and local knowledge dialogue workshops. The workshops will provide the opportunity for dialogue between members of indigenous peoples and local communities and authors of the assessments. The key subjects to be discussed include refining key indigenous and local knowledge questions which would frame the narrative and analysis of the assessments, defining key resources and experts for the assessments, and discussing methodologies and timelines. These workshops are planned as follows:

(i) A dialogue workshop for the values assessment to take place on 20 and 21 March 2019 in Paris;

(ii) A dialogue workshop for the sustainable use assessment to take place on 6 and 7 May 2019 in Paris.

E. Activities by other organizations in support of the implementation of the IPBES indigenous and local knowledge approach regarding completed assessments

33. In line with the IPBES approach to indigenous and local knowledge, IPBES partners engaged in a post-assessment dialogue on key messages and policy uptake from the pollination assessment, working with indigenous and local knowledge holders, assessment authors, academics and national governments. The “*Dialogue across indigenous, local and scientific knowledge systems reflecting on the IPBES Assessment on Pollinators, Pollination and Food Production*” took place from 21 to 25 January 2019 in the Karen community of Hin Lad Nai, Chiang Rai, Thailand. The dialogue was initiated and organized by SwedBio and Stockholm Resilience Centre together with the Karen indigenous organizations Pgakenyaw Association for Sustainable Development and Inter Mountain People Education and Culture Association in Thailand; and the UNESCO Natural Sciences Sector. Dialogue participants included indigenous and local knowledge holders and experts from Antigua and Barbuda, Guatemala, India, Kenya, Mexico, Myanmar, New Zealand, and Panama, and scientists engaged in the IPBES Pollination Assessment, together with local pollinator experts, and representatives from a number of local, national and global institutions and United Nations organizations.

34. The dialogue was designed using a walking workshop approach in forest and rotational farming fields, guided by Karen experts from the community. Participants jointly analysed key messages of the IPBES pollination assessment, ascertaining whether indigenous and local experts agreed with the outcomes, identifying possible gaps, and discussing policy relevance and uptake. The workshop concluded that the key messages were relevant and reflected well the diverse needs and understandings of the indigenous and local knowledge holders present, and that there were no substantive gaps in the key messages. The last day, an international seminar at Chiang Mai University, presented the main findings of the Pollination Assessment and the outcomes of the dialogue, and the Thai Ministry of the Environment and Natural Resources summarised its response to the assessment. Summary reports from the dialogue will be available online.

35. Other post-assessment science-policy processes involving indigenous peoples and local communities include sub-regional dialogues organized as part of the “Capacity-Building Project for the Implementation of IPBES Asia-Pacific Regional Assessment” funded by the Japan Biodiversity Fund through the secretariat of the Convention on Biological Diversity. Under the project’s third component, the Asia Pacific Network for Global Change Research and the Institute for Global Environmental Strategies, in collaboration with the IPBES technical support unit for the Asia-Pacific Regional Assessment, organizes a series of three science-policy dialogues at the sub-regional level for South Asia and West Asia (Kathmandu, Nepal, 26 to 28 February 2019); Oceania (Canberra, Australia, 4 and 5 April 2019); and East Asia and Southeast Asia (Bangkok, Thailand, October 2019, to be confirmed). The purpose of these Asia-Pacific dialogues is to facilitate understanding of the findings of the assessment, including the policy options to mitigate the deterioration of biodiversity and ecosystems in the region. The primary audience will be national policymakers, while other decision-makers and stakeholders including indigenous peoples and local communities will also be invited.

IV. Next steps

A. Recognizing and working with indigenous and local knowledge in the next work programme

36. Over the next work programme of IPBES (see document IPBES/7/6), it is proposed that the task force on indigenous and local knowledge, supported by a technical support unit, would continue to support IPBES work on indigenous and local knowledge in line with the IPBES approach to indigenous and local knowledge and the related draft methodological guidance. The task force would continue to support and build on the work of the assessments, while also increasingly focusing on the other IPBES functions, as follows:

(a) For assessments (deliverables under objective 1): (i) collaboratively defining the problems and goals during the scoping of an assessment; (ii) synthesizing and incorporating into the assessment a wide array of evidence and data from multiple sources of indigenous and local knowledge related to the assessment; (iii) appropriately and effectively engaging indigenous peoples and local communities in the review of the various drafts of an assessment; and (iv) sharing knowledge and insights gained through the assessment with indigenous peoples and local communities once the assessment is completed;

(b) For knowledge and data (deliverable 3a): identification of relevant experts; facilitating, via the web-based infrastructure of the Platform, access and management of available sources related to indigenous and local knowledge; promoting and catalysing the mobilization of indigenous and local knowledge; taking into account appropriately those aspects relevant to indigenous and local knowledge and indigenous peoples and local communities in the work on knowledge and data;

(c) For supporting policy (deliverables under objective 4): identification, description and facilitation of the use of relevant tools, methods and guidelines for implementing the four phases of the approach for assessments summarized in paragraph (a) above, and the promotion and catalysation of their further development; as well as the reflection of tools and methodologies relevant to indigenous and local knowledge and indigenous peoples and local communities in IPBES assessments;

(d) For building capacity (deliverable 2), identification, prioritization and the building of capacity critical to the implementation of the approach; and the promotion of collaboration and partnerships with relevant organizations;

(e) Regarding the participatory mechanism: providing a web-based platform to facilitate engagement of existing networks of indigenous peoples and local communities and relevant experts and to allow new networks to develop; promoting, through consultations, a dialogue with various networks, relevant experts and policymakers to mobilize inputs and disseminate results during all four

phases of the assessment process; creating opportunities for shared learning and exchange through dedicated discussion forums; and engaging in partnerships, to promote and implement the approach.

37. Particular areas of focus for the next work programme would potentially include the following:

- (a) Working with indigenous and local knowledge and consultation of representatives of indigenous peoples and local communities during the scoping processes for assessments;
- (b) Working with indigenous and local knowledge under key thematic areas, including scenarios;
- (c) Working with indigenous peoples and local communities in post-assessment science-policy processes, and working on methodologies for outreach and giving back to communities once an assessment is completed;
- (d) Building up the web-based infrastructure to support the participatory mechanism, including further development of a roster of experts;
- (e) Working with indigenous peoples and local communities on capacity building activities, to increase their ability to participate in and contribute to IPBES processes in ways that benefit indigenous peoples and local communities and utilise their own networks and institutions;
- (f) Working to build capacity for and to catalyse local-level research and biodiversity monitoring projects that will, in the longer term, document indigenous and local knowledge that can be utilised in future IPBES assessments and in national-level biodiversity assessments;
- (g) Working with assessment authors and policy-makers on capacity building activities which improve their ability to work with indigenous peoples and local communities and to engage with indigenous and local knowledge;

B. Activities planned until the eighth session of the Plenary

38. If the Plenary decided to re-establish a task force on indigenous and local knowledge, the task force, supported by a technical support unit, would undertake the activities set out in the following paragraphs in the intersessional period until the eighth session of the Plenary.

39. The task force, supported by its technical support unit, would continue to support the work of the indigenous and local knowledge liaison groups for the assessment on values and the assessment of the sustainable use of wild species, including by:

- (a) Providing support, guidance and technical support on methodological issues;
- (b) Providing connections to networks of indigenous peoples and local communities that can provide support to the assessments as contributing authors, dialogue workshop participants, or as on-line reviewers of assessment materials;
- (c) Organising and supporting dialogue workshops on indigenous and local knowledge, including; in particular:
 - (i) Values: a dialogue workshop to engage indigenous peoples and local communities in the review of the first order drafts of the assessment, foreseen for July or August 2019, and a workshop for the second order draft, foreseen for the third quarter of 2020.
 - (ii) Sustainable use: a dialogue workshop to engage indigenous peoples and local communities in the review of the first order drafts of the assessment, foreseen for July or August 2019, and a workshop for the second order draft, foreseen for the third quarter of 2020.
- (d) Facilitating online and local-level reviews of the first order drafts and second order drafts of the two assessments with networks of indigenous peoples and local communities.

40. The task force and technical support unit would support the work of the assessment of alien invasive species, including by:

- (a) Assisting the co-chairs of the assessment in setting up an indigenous and local knowledge liaison group for the assessment of alien invasive species, during or before the first author meeting that will be held in August 2019;
- (b) Providing guidance on methodological issues and support for indigenous and local knowledge activities as needed;

- (c) Working with the indigenous and local knowledge liaison group to develop key indigenous and local knowledge questions and methods for the assessment, during and directly after the first author meeting;
- (d) Organising and coordinating a call for contributions on indigenous and local knowledge for the assessment on alien invasive species;
- (e) Organising and supporting dialogue workshops on indigenous and local knowledge, including:
 - (i) A dialogue workshop to engage indigenous peoples and local communities in the framing and development of the assessment, including review and development of key indigenous and local knowledge questions (planned to be held in conjunction with the first author meeting in August 2019);
 - (ii) A dialogue workshop for the review of the first order draft of the assessment (foreseen first quarter of 2020).
- (f) Facilitating online and local-level reviews of assessment materials with networks of indigenous peoples and local communities, including:
 - (i) Online reviews to engage indigenous peoples and local communities in the framing and development of the assessments, including review and development of key indigenous and local knowledge questions;
 - (ii) Online and local level reviews of the first order drafts of the assessment (foreseen first quarter of 2020).

41. In line with the IPBES approach to indigenous and local knowledge, the task force and the technical support unit would support the post assessment work of the global assessment, including by supporting and advising on science-policy interface processes, giving back to indigenous peoples through workshops and materials development aimed specifically at outreach to indigenous peoples and local communities.

42. The task force would also continue to work on overarching cross-cutting issues related to the participatory mechanism, including:

- (a) Further refining and developing methods and participatory activities, building on lessons learnt from the newly completed global assessment, and new lessons, opportunities and challenges emerging from the ongoing assessments. This work would take place through input from and meetings of the task force on indigenous and local knowledge;
- (b) Further development of a database of indigenous and local knowledge holders, indigenous and local knowledge experts, and experts on indigenous and local knowledge to be used as a resource for ongoing and future assessments;
- (c) Further development of the database of indigenous and local knowledge literature, building on materials collected during the pollination assessment, the four regional assessments, the land degradation and restoration assessment, the global assessment, the values assessment, the sustainable use assessment and the invasive species assessment.

Appendix I

Report on the seventh meeting of the IPBES task force on indigenous and local knowledge

UNESCO Headquarters, Paris, 27 and 28 September 2018

Introduction

Objectives of the meeting

The seventh meeting of the IPBES task force on indigenous and local knowledge was held at UNESCO in Paris, France, from 27-28 September 2018.

Objectives of the meeting were:

1. To give a brief overview of the mandate of the task force on indigenous and local knowledge, and processes and achievements so far, with a focus on those approved by the Plenary;
2. To examine the different stages of the assessment cycle and post assessment processes, and broader areas of IPBES work, with the aim of:
 - (a) Assessing how indigenous and local knowledge has been included so far in IPBES assessments and policy support work, and any challenges, particularly in terms of knowledge co-production and access, modes of knowledge integration, representation/engagements and capacity;
 - (b) Exploring the participatory mechanism: what was the Plenary decision, what is working well, what could be improved, where are the gaps? How can broader networks and other organizations support these efforts?
 - (c) Providing additional methodological guidance for the assessment cycle, which will complement and support the indigenous and local knowledge approach and specifically will support the three upcoming assessments, by looking at lessons learnt from past assessments;
 - (d) Drafting a methodological guidance on recognizing and addressing indigenous and local communities for the assessment cycle, including:
 - (i) Activities and processes for the participatory mechanism at all stages of the assessment cycle, and where applicable for other areas of IPBES work;
 - (ii) Recommendations for future directions for the task force on indigenous and local knowledge and IPBES in the next work programme;
 - (e) Exploring how work on indigenous and local knowledge can be enhanced across all domains of IPBES, in addition to assessments, by strengthening engagement with indigenous peoples and local communities and their networks.
3. To contribute to the next IPBES work programme from an indigenous and local knowledge perspective, and the future directions and expertise of the indigenous and local knowledge task force.

Context

The seventh meeting of the task force was held in conjunction with a number of other meetings taking place within the same week and in the same venue, specifically:

- (a) An indigenous peoples' consultation on the application of the participatory mechanism (24 and 25 September 2018);
- (b) The sixth meeting of the capacity-building task force (24 September 2018);
- (c) The third meeting of the IPBES forum on capacity-building (25 and 26 September 2018, with ensuing discussion groups on 27 September 2018). On 26 September, the forum had a particular focus on indigenous and local knowledge and was attended by the task force on indigenous and local knowledge and the participants of the indigenous peoples' consultation.

As these meetings addressed interrelated subject matters, holding them concurrently and back-to-back allowed for participants to attend multiple meetings and outcomes to be shared among all relevant groups. For example, participants in the indigenous people's consultation attended the capacity-building forum, and two participants of the indigenous peoples' consultation attended the meeting of the task force on indigenous and local knowledge, and members of the task force on indigenous and local knowledge attended the capacity-building forum for one day.

Key recommendations and discussion points of the meeting

Overview of mandate, processes and achievements

The task force discussed the first IPBES work programme, and participants shared their experiences regarding IPBES work with indigenous and local knowledge and engagement with indigenous peoples and local communities, particularly connected to assessments.

The task force formulated a list of recommendations regarding the assessment process:

- (a) The assessment process needs more time in order to allow more indigenous and local knowledge inputs, especially during the review periods for the first order drafts and second order drafts;
- (b) There should be more indigenous and local knowledge experts engaged in the assessment process (as co-chairs, coordinating lead authors, and lead authors in each chapter of an assessment);
- (c) The gap filling process for authors from indigenous peoples and local communities, that is indigenous and local knowledge experts which can be indigenous and local knowledge holders, could be more efficient;
- (d) The creation of a fellowship programme for representatives of indigenous peoples and local communities could bring more indigenous and local knowledge expertise into IPBES processes;
- (e) Face-to-face dialogue meetings are more effective for engaging with indigenous peoples and local communities than online processes;
- (f) There should be more cross-chapter connections and coordination (not only regarding inclusion of indigenous and local knowledge but also to frame key messages in the summary for policymakers related to indigenous and local knowledge);
- (g) Authors without experience in working with indigenous and local knowledge can be mentored and motivated to engage with indigenous and local knowledge literature, and encouraged to attend indigenous and local knowledge dialogues, to raise their interest, capacity and understanding;
- (h) Adequate time should be made available to gather indigenous and local knowledge materials during the writing process;
- (i) Indigenous peoples and local communities from all regions should be involved.

Participatory mechanism and methodological guidance

The task force on indigenous and local knowledge considered a draft of the methodological guidance for recognizing and working with indigenous and local knowledge in IPBES, prepared by the technical support unit based on materials produced to guide the global assessment, and took into account discussions and feedback from the indigenous peoples' consultation on the application of the participatory mechanism and the third meeting of the IPBES forum on capacity building. The methodological guidance is intended to support IPBES authors in operationalizing the IPBES approach on indigenous and local knowledge. This methodological guidance also aims to outline processes for the participation of indigenous peoples and local communities throughout the assessment process.

During and following the meeting, the draft methodological guidance was updated, as the main product from this meeting. The current draft will be provided to the Multidisciplinary Expert Panel and Bureau, at their twelfth meetings, and will be revised in line with comments received. It is intended that a working draft will be shared with assessment authors at the first author meetings of the assessment of the sustainable use of wild species and the assessment on values. A revised draft of the methodological guidance will be shared with the Multidisciplinary Expert Panel and the Bureau, for their endorsement.

Overarching comments on the methodological guidance

The task force formulated some recommendations regarding the overall methodological guidance and the assessment process, in addition to the comments on the assessment process listed above:

- (a) There needs to be a process for monitoring and tracking indigenous peoples and local communities' participation throughout the assessment cycle and in other areas of IPBES work;

(b) A visual map similar to that given for the assessment cycle in the guide to assessments could be valuable, to clearly show how indigenous peoples and local communities could contribute at each stage of the assessment.

Addressing indigenous and local knowledge throughout the assessment cycle

Scoping

The task force recommended that indigenous peoples and local communities should be involved in the scoping expert group. The task force members also recommended organizing scoping workshops with indigenous peoples and local communities.

Nomination of experts

The task force members observed that indigenous and local knowledge was better addressed when an assessment co-chair, or a coordinating lead author, was an expert on indigenous and local knowledge (or an indigenous and local knowledge expert).

They noted that:

- (a) Current IPBES procedures requiring 80% of authors to be selected from among government nominations greatly limit the scope for participation by members of indigenous peoples and local communities;
- (b) The gap filling mechanism can be used to recruit indigenous and local knowledge experts, which can be knowledge holders, and experts on indigenous and local knowledge, but this is not ideal;
- (c) They recommended that:
- (d) Indigenous and local knowledge experts should be nominated as authors from the beginning of the assessment, and that there may need to be a separate procedure to ensure that this happens;
- (e) There are diverse knowledge systems used in the production of assessments. Hence, validation should arise from the knowledge system itself. So, there should be specific selection criteria for indigenous and local knowledge experts. This could include not prioritizing the number of publications and opening the nominations to non-English speakers;
- (f) Indigenous peoples and local community networks or IIFBES and other IPBES stakeholders or partners could organize and coordinate the nominations of indigenous and local knowledge experts, which can be knowledge holders, or experts on indigenous and local knowledge;
- (g) Support may be needed for the participation of indigenous and local knowledge experts as assessment authors, this could potentially be provided through the networks of indigenous peoples and local communities who nominate them, or budget could be provided by IPBES or donors could be found to support their participation;
- (h) A focus should be put on communications to enhance indigenous peoples and local communities' involvement;
- (i) When specific knowledge gaps are identified, additional indigenous and local knowledge experts could be recruited as contributing authors;
- (j) The IPBES fellowship programme could focus more specifically on recruiting young indigenous and local knowledge experts into the assessment process by mobilizing networks and institutions of indigenous peoples and local communities.

Developing guiding questions

The task force recommended that indigenous peoples and local communities should be involved in the development of the guiding questions for indigenous and local knowledge in the different chapters of each assessment, potentially through dialogue workshops and targeted online surveys.

It was also noted that a key question for IPBES assessments should be related to the conditions needed for indigenous peoples and local communities to fully contribute their knowledge and interests to the development of a nature-based, knowledge-based economy benefitting people and nature.

Writing and assessment production

The task force discussed the main challenges faced during the writing and production phases of the recently approved assessments. These included:

- (a) There are challenges such as getting permission and feedback in giving value and attention to other forms of knowledge materials (for example art) in a written assessment but it is still worthwhile adding them in the assessment process, as was done in the pollinator assessment, ensuring free prior and informed consent;
- (b) Building on the experience of the Regional Assessment of Biodiversity and Ecosystem Services for Europe and Central Asia, the development of a list of indigenous and local knowledge references was recommended, as many authors are not aware of the existing literature on indigenous and local knowledge;
- (c) The Satoyama Initiative is a good example on how to engage with indigenous peoples and local communities (preparation of specific questions and visit to indigenous peoples and local communities to answer those questions);
- (d) Respecting free prior and informed consent principles, and working as closely as possible with indigenous peoples and local communities is key to good collaboration.

Dialogue workshops

Dialogue workshops were recognized by different assessments as a key activity for engaging with indigenous peoples and local communities and indigenous and local knowledge. The task force made many observations, including:

- (a) Dialogue workshops are needed throughout the assessment cycle, including for scoping, developing key guiding questions for an assessment, and reviews of first and second order drafts;
- (b) There is a need to carefully consider the types of indigenous and local knowledge expertise needed at dialogue workshops. Some stages of the assessment cycle may require generalists who are able to comment on overall processes, and issues related to indigenous peoples and local communities and indigenous and local knowledge. Other more in-depth specific questions may require that specialists are sought in particular indigenous and local knowledge fields, and that they engage with appropriate scientific experts (for example agronomists engaging with agriculturists or a forestry expert engaging with forest users);
- (c) Dialogue workshops allow indigenous peoples and local communities and authors to develop case studies and mutual understandings of the value of indigenous and local knowledge. They also function as a capacity building mechanism for indigenous peoples and local communities as well as the scientists;
- (d) Dialogue workshops could be organized allowing authors and indigenous peoples and local communities to co-write text or material to go in a chapter;
- (e) Networks of indigenous peoples and local communities could be mobilized online to answer the key questions developed for a chapter during dialogues, or can be used to mobilize information prior to dialogue workshops.

Outreach from the assessments

The task force discussed different modes of outreach for indigenous peoples and local communities, including information and education materials, fact sheets and social media. They recommended that a strategy be developed with indigenous peoples and local communities, possibly through a dialogue workshop at the end of the assessment process to determine key needs and ways forward.

Future directions and structure of the task force on indigenous and local knowledge

The task force proposed new functions and structure for itself, which could potentially be taken up for the next work programme. The proposal discussed was based on the proposal for the participatory mechanism that had been developed during the fifth and sixth meetings of the task force, and presented to the Multidisciplinary Expert Panel at its tenth meeting. At its seventh meeting, the task force agreed that the structure was a good representation of their previous discussions and provided feedback on refinements and some structural issues. The result of this discussion will be presented to the Multidisciplinary Expert Panel and Bureau for discussion at their twelfth meetings. The structure reflects the functions of the task force, with the aim of building in more participation from indigenous peoples and local communities and relevant organizations.

List of participants at the seventh meeting of the IPBES task force on indigenous and local knowledge

Task force members

Fisher, Judy (co-chair)	Director, Fisher Research, Australia
Karki, Madhav (co-chair)	International Union for the Conservation of Nature (IUCN) Commission on Ecosystem Management, Nepal
Adem, Çiğdem	The Public Administration Institute for Turkey & the Middle East (TODAIE), Turkey
Adou, Constant Yves Yao	Félix Houphouët-Boigny University, Ivory Coast
Alangui, Wilfredo	University of the Philippines, Philippines
Carino, Joji	Centres of Distinction on Indigenous and Local Knowledge, United Kingdom/Philippines
Carneiro Da Cunha, Maria Manuela	The University of Chicago, United States of America
Diaw, Mariteuw Chimère (Multidisciplinary Expert Panel)	African Model Forests Network Secretariat, Cameroon
Figueroa, Viviana Elsa	Indigenous Women Network on Biodiversity, Argentina
Hernandez, Ana-Maria (Bureau)	Alexander von Humboldt Biological Resources Research Institute, Colombia
Hill, Rosemary	Commonwealth Scientific and Industrial Research Organisation (CSIRO) - Ecosystem Sciences, Australia
Kariuki, Peris	National Museums of Kenya, Kenya
Molnár, Zsolt	Centre for Ecological Research, Hungarian Academy of Sciences, Hungary
Roba, Hassan	The Christensen Fund, Kenya
Roué, Marie	The National Center for Scientific Research (CNRS), France
Xue, Dayuan	School of Life and Environmental Science, Minzu University of China, China

Additional participant

Reyes Garcia, Victoria	Global assessment author
------------------------	--------------------------

IPBES secretariat

Bates, Peter	IPBES technical support unit for indigenous and local knowledge / UNESCO
Brown, Claire	IPBES technical support unit for the catalogue of assessments
Crawhall, Nigel	IPBES technical support unit for indigenous and local knowledge / UNESCO
Gueze, Max	IPBES technical support unit for the global assessment
Koetz, Thomas	IPBES secretariat headquarters
Larsen, Amalie	IPBES technical support unit for indigenous and local knowledge / UNESCO
Renard-Truong, Tanara	IPBES technical support unit for indigenous and local knowledge / UNESCO

Appendix II

Report from the indigenous peoples' consultation on the participatory mechanism

UNESCO Headquarters, Paris, 24 and 25 September 2018

Introduction

Objectives of the consultation

This meeting brought together representatives of indigenous peoples and local communities, IPBES experts, including three members of the task force on indigenous and local knowledge, and the IPBES secretariat and technical support unit for indigenous and local knowledge to discuss the IPBES participatory mechanism. The objectives of the consultation were:

- (a) To provide an opportunity for representatives of indigenous peoples and local communities to discuss their engagement in all areas of IPBES work, particularly through the participatory mechanism. Areas of discussion included the assessment cycle, capacity-building, knowledge and data, and policy development processes;
- (b) To review the current state of the participation of indigenous peoples and local communities and the inclusion of indigenous and local knowledge in all areas of IPBES work, to identify successes, lessons learnt, and gaps;
- (c) To generate a set of recommendations to IPBES for the further development of the participatory mechanism, to be taken forward by the IPBES forum on capacity-building (26 September 2018) and the seventh meeting of the IPBES task force on indigenous and local knowledge (27 and 28 September 2018), and with a view to inform the Plenary at its seventh session on the application of the participatory mechanism. These recommendations were also intended to be used for planning further dialogue with the IPBES secretariat and IPBES governing bodies.

Context

The indigenous peoples' consultation on the IPBES participatory mechanism mandated by the IPBES Plenary was held in conjunction with a number of other meetings taking place within the same week and in the same venue, specifically:

- (a) The meeting of the IPBES capacity-building task force (24 September 2018);
- (b) The third meeting of the IPBES forum on capacity building (25 and 26 September 2018, with ensuing discussion groups on 27 September 2018). Participants of the indigenous peoples' consultation were invited to attend the capacity-building forum on 25 September 2018, morning, and 26 September, and attended the discussion groups all day on 27 September;
- (c) The seventh meeting of the IPBES task force on indigenous and local knowledge (27 and 28 September 2018).

The aim was for the indigenous peoples' consultation on the IPBES participatory mechanism to feed into these other meetings, through report-backs and cross-over participation.

Key results and recommendations from the consultation

Indigenous peoples and local community engagement in IPBES assessments

Monitoring of participation

Participants of the consultation noted that there is currently no mechanism for tracking the participation of indigenous peoples and local communities throughout the IPBES assessment process. They recommended that monitoring and reporting takes place for all stages of the IPBES assessment cycle, and where appropriate in other IPBES activities. This would include success rates of members of indigenous peoples and local communities being nominated and selected as authors, participation in online calls, and the quality of indigenous and local knowledge presented in final assessment reports. This monitoring and reporting process would be a key feature of the participatory mechanism.

Representation of indigenous peoples and local communities in author groups

Within IPBES, expert selection is limited to officially nominated individuals and is overseen by the Multidisciplinary Expert Panel and Bureau. The Multidisciplinary Expert Panel is restricted to select a minimum of 80% of experts from among the nominations by governments, while selected experts

nominated by relevant stakeholders should comprise a maximum of 20%. With regards to indigenous and local knowledge, there is no strict policy to ensure expertise balance.

In cases where a balanced expert group cannot be achieved, or where there is a gap in expertise in some author groups, additional targeted nominations can be sought from governments and stakeholders in a follow-up “gap filling” process.

Participants recommended that an appropriate representation of indigenous and local knowledge experts and holders should be ensured from the beginning of the assessment process, potentially through a separate nomination and selection process that accounts for indigenous and local knowledge experience and knowledge (which may not be reflected, for example, in a record of peer-reviewed publications). They highlighted that indigenous and local knowledge experts or holders are not always supported by their governments, and that IPBES should allow them to be nominated by networks of indigenous peoples and local communities.

Participants emphasized that funding support may be crucial for participation of members of indigenous peoples and local communities as authors, as many countries offer no financial support, whereas scientists may get fellowships.

There is no tracking mechanism to oversee the IPBES author nomination process. The success rates of indigenous peoples and local communities being selected as authors are not known or monitored. Participants recommended that success rates should be monitored and reported, as part of the overall process of tracking the participation of indigenous peoples and local communities throughout the assessment process (discussed above).

Recognizing indigenous and local knowledge holders as authors

Participants emphasized that members of indigenous peoples and local communities should be acknowledged as authors of the IPBES dialogue workshop reports, and as contributing authors in the assessments if this knowledge was used to inform the assessments, for example in an acknowledgement section in assessments.

As time, capacity and limitations in communication such as internet access may limit the ability of indigenous peoples and local communities to contribute to the assessment process, support may be needed to facilitate the engagement of individuals from or networks of indigenous peoples and local communities.

It was also noted that scientific research is often based in part on indigenous worldviews and knowledge, as researchers may be guided by indigenous peoples and local communities on their fieldwork, even though indigenous peoples and local communities are not recognized as authors. IPBES capacity building could do work to extend recognition of the contributions of indigenous peoples and local communities to scientific research.

Scoping and online calls for contributions and inputs

To enhance the participation of indigenous peoples and local communities in IPBES assessments, participants highlighted that the process by which author teams develop key questions for each chapter should be informed by the participation of indigenous peoples and local communities, particularly through dialogue workshops, which would aim to highlight key resources, discuss methods, and highlight issues that might be of concern to indigenous peoples and local communities. Those specific questions could also be disseminated by groups of indigenous peoples and local communities to their networks in online surveys and calls for input, further informing the process and increasing the participation of indigenous peoples and local communities.

During this process, networks of indigenous peoples and local communities may want IPBES to track participation rates in online processes in order to evaluate outreach.

Mobilizing different knowledge systems

Participants reported that engaging with indigenous and local knowledge means that the author team should give attention to:

- (a) How indigenous and local knowledge is described in assessments (for example as directly contributing to the achievement of the sustainable development goals);
- (b) Different understandings of nature. IPBES highlights nature’s contributions to people, but should not forget about peoples’ contributions to nature;

- (c) Reports produced by groups of indigenous peoples and local communities on thematic areas, for example the Local Biodiversity Outlooks prepared to complement the Global Biodiversity Outlook prepared under the Convention on Biological Diversity;
- (d) Developing methodologies that are understandable by both scientists and indigenous peoples and local communities. Assessments are currently biased towards people who favour written forms of knowledge expression, rather than oral;
- (e) Safeguards to ensure rights to use of the knowledge shared.

Review of first and second order drafts of assessments

Participants recommended a mechanism to facilitate the review of draft assessments by indigenous peoples and local communities instead of inviting networks of indigenous peoples and local communities to participate in online reviews of these documents. This mechanism could consist of dialogue workshop(s) specifically on the first or second order drafts, between authors and indigenous and local knowledge holders and indigenous and local knowledge experts, with results of the dialogues submitted as part of the review process by the dialogue organizers or technical support unit.

Giving back to communities

Participants recommended that products specific to indigenous peoples and local communities should be developed from completed assessments. For example, the author team could develop a database of key recommendations and fact sheets or policy briefs aimed at indigenous peoples and local communities. Participants recommended that IPBES should give indigenous peoples and local communities the rights to use these materials on their own websites and media.

Participants recommended that IPBES could organize dialogues or workshops with indigenous peoples and local communities on products from the assessments.

Participants also described how their networks have made short social media messages and images to convey the results of IPBES assessments, rather than long texts, and recommended further exploration of how different indigenous peoples and local communities use social media.

Policy processes at the local level

Participants suggested that IPBES could help to connect indigenous peoples and local communities with national and local governments by promoting the recognition of conservation and monitoring by indigenous peoples and local communities through assessment recommendations.

Participants also observed the lack of support for transmission of knowledge at the local level and suggested that IPBES could aim to mobilize support for programmes and projects that support knowledge transmission in communities.

Policy processes at the national level

Participants reflecting on how IPBES could strengthen its impact at the national level with regard to the interface between indigenous peoples and local communities and policy. Participants observed that this work often relies on “champions” and focal points at the national level. If these people are not present, then the engagement can be minimal. Even so, often engagement at the community level is limited and challenging. Participants recommended that IPBES should extract key messages from its assessments and produce policy options or guidelines for governments on working with indigenous peoples and local communities.

Participants also recognized the need for post-assessment knowledge-policy processes. Asia-Pacific dialogues currently being organized by the Institute for Global Environmental Strategies, Japan may set good examples of post assessment processes connecting indigenous peoples and local communities, scientists and policy-makers.

Methodologies for engaging with indigenous peoples and local communities

Participants recognized that IPBES is a leader in working with indigenous and local knowledge and indigenous peoples and local communities. Other international organizations and agencies are watching the progress of IPBES to learn lessons. Participants discussed some key methodologies to enhance IPBES engagement with indigenous peoples and local communities.

Nature’s contributions to people and people’s contributions to nature

Participants highlighted the fact that IPBES needs to have a better vision of human activities, for humans have been managing and creating landscapes and biodiversity for centuries. Therefore “people’s contributions to nature” should be addressed, alongside nature’s contributions to people.

Co-production and complementarity of knowledge systems

Participants agreed that co-production of knowledge implied mutual respect and understanding but highlighted that indigenous and local knowledge is often extracted and then validated by scientists, which is not co-production. They reported power imbalances and suggested that “complementarity of knowledge systems” may be a better way of approaching research and building common visions of knowledge.

As relationships are crucial in any collaboration, participants expressed the need to recognize and give credit to expertise of indigenous and local knowledge holders.

Capacity-building for scientists

Participants asserted that capacity building should be a two-way process: scientists need guidance and training on research protocols to engage with indigenous peoples and local communities and awareness about the contributions of indigenous and local knowledge to biodiversity conservation and management.

Knowledge sharing platforms

Comments on the web-based platform

A web-based platform is highlighted in IPBES documents as a key feature of the participatory mechanism. However, participants highlighted that this should not be the key mechanism for participation by indigenous peoples and local communities for several reasons:

- (a) Indigenous peoples and local communities prefer face-to-face dialogues;
- (b) Indigenous peoples and local communities do not always have good internet connections;
- (c) Often the language of web platforms limits the participation of indigenous peoples and local communities;
- (d) The registration process can be difficult.

Participants recommended that the web-based platform should explain the IPBES process, organization and role, scope and functions, and compile all the decisions made concerning indigenous peoples and local communities. The platform should also provide guidance on free prior and informed consent for participants who are submitting knowledge to assessments. They also asked for a space on the platform managed by the centres of distinction on indigenous and local knowledge.

Self-organized networks

Participants agreed that self-organized networks of indigenous peoples and local communities, such as the International Indigenous Forum on Biodiversity and Eco-System Services, would be the main mechanism for the participation and organization of indigenous peoples and local communities. They noted that the Indigenous Forum on Biodiversity and Eco-System Services includes some local community groups, and therefore its scope reached beyond indigenous networks.

Structure of the task force on indigenous and local knowledge

Participants also discussed the structure of the current task force on indigenous and local knowledge, and generated ideas to strengthen it by making it inclusive to indigenous peoples and local communities as well as strategic partners of IPBES. They made the following recommendations on how indigenous peoples and local communities can be represented on the indigenous and local knowledge task force:

- (a) Include representatives of indigenous peoples and local communities from seven regions (Asia, Africa, Arctic, Latin America & the Caribbean, Pacific, North America and Russia);
- (b) Each region would nominate one main and one alternate representative to the indigenous and local knowledge task force;
- (c) The Indigenous Forum on Biodiversity and Eco-System Services shall be the focal point in facilitating and coordinating the submission of names from indigenous peoples and local communities to IPBES;
- (d) The Indigenous Forum on Biodiversity and Eco-System Services would coordinate and facilitate a process with the self-organized networks of each region for regional nominees;

(e) Nominated representatives of indigenous peoples and local communities by the Indigenous Forum on Biodiversity and Eco-System Services shall automatically be endorsed by IPBES to be represented in the governing body of the task force.

List of participants at the Indigenous Peoples' consultation on the IPBES participatory mechanism

Indigenous peoples' representatives

Name	Country	Organisation
Joji Cariño	Philippines / UK	Centres of Distinction on Indigenous and Local Knowledge / Forest Peoples Programme
Florence Daguitan	Philippines	Tebtebba
Viviana Figueroa	Argentina	Indigenous women's network on biodiversity
Preston Hardison	USA	Tulalip Tribes
Guadalupe Yesenia Hernández Márquez	Mexico	Indigenous and local knowledge focal point for IPBES in Mexico
Nimal Hewanila	Sri Lanka	Nirmalee Development Foundation
Edna Kaptoyo	Kenya	Indigenous Information Network www.indigenous-info-kenya.net
Onel Masardule	Panama	Fundación para la Promoción del Conocimiento Indígena
Maria Elena Regpala	Philippines	Partners for Indigenous Knowledge
Lakpa Nuri Sherpa	Nepal	Asia Indigenous Peoples Pact
Tui Shortland	New Zealand	Te Kopu Pacific Centre of Distinction on Indigenous and local Knowledge
Polina Shulbaeva	Russia	Focal Point for Biodiversity and IPBES, Center for Support of Indigenous Peoples of the North, Indigenous and local Knowledge Centre
Prasert Trakansuphakon	Thailand	Pgaz K' Nyau Association for Sustainable Development, Thailand

Other organizations

Ikuko Matsumoto	Institute for Global Environmental Strategies, Japan
Maurizio Farhan Ferrari	Forest Peoples Programme

IPBES

Bates, Peter	IPBES technical support unit for indigenous and local knowledge / UNESCO
Crawhall, Nigel	IPBES technical support unit for indigenous and local knowledge / UNESCO
Fisher, Judy	Co-chair of the IPBES task force on indigenous and local knowledge
Gueze, Max	IPBES technical support unit for the global assessment
Koetz, Thomas	IPBES secretariat headquarters
Renard-Truong, Tanara	IPBES technical support unit for indigenous and local knowledge / UNESCO

Appendix III

Draft methodological guidance for recognizing and working with indigenous and local knowledge in IPBES

Development of the draft methodological guidance

This draft of the *methodological guidance for recognizing and working with indigenous and local knowledge in IPBES* is based on work on indigenous and local knowledge methods that has taken place since the inception of IPBES. Much of this work has been led by the task force on indigenous and local knowledge with support from indigenous peoples and local communities and other strategic partners. Previous IPBES assessments, including the four regional assessments of biodiversity and ecosystem services, the assessment of land degradation and restoration and the pollination assessment, have all helped to advance the ways that indigenous and local knowledge is understood and approached within IPBES. This evolution of methods and approaches led to the adoption of the IPBES approach to recognizing and working with indigenous and local knowledge as set out in annex II to decision IPBES-5/1. This was most recently employed in the global assessment, and much of the contents of this methodological guidance are adapted from documents produced to guide or discuss the global assessment of biodiversity and ecosystem services:

- Operationalizing ‘Indigenous and Local Knowledge and Practices’ (ILK) and the role of Indigenous People and Local Communities (IPLCs) in the IPBES Global Assessment (GA). Prepared by Eduardo S. Brondizio and revised 2 May 2017.
- The report of a meeting on indigenous and local knowledge in the IPBES global assessment on biodiversity and ecosystem services, held 31 March - 2 April 2017 in Budapest.
- Pamela McElwee, Hien Ngo, Álvaro Fernández-Llamazares, Victoria Reyes-García, Zsolt Molnár, Maximilien Gueze, Eduardo Brondizio and Sandra Díaz. In press. *Including Indigenous and Local Knowledge in the Work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES): Outcomes and Lessons for the Future*. A contribution to The Routledge Handbook of Indigenous Environmental Knowledge.

The indigenous peoples’ consultation on the IPBES participatory mechanism, which took place in Paris, France 24 – 25 September 2018, was also invaluable in further shaping the methodological guidance.

Contents

1	INTRODUCTION	24
1.1	Background and aims.....	24
1.2	Contributions to the functions of IPBES.....	24
1.2.1	Knowledge and data	24
1.2.2	Policy support tools and methodologies	25
1.2.3	Capacity building.....	25
1.3	Structure of the methodological guidance	25
1.4	Terminology	25
1.4.1	Indigenous and local knowledge	25
1.4.2	Indigenous peoples and local communities	26
1.4.3	Indigenous peoples and indigenous knowledge.....	26
1.4.4	Local communities and local knowledge.....	27
1.4.5	Definitions of indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge	27
2	THE IPBES PARTICIPATORY MECHANISM	28
2.1	Background.....	28
3	WORKING WITH FREE PRIOR AND INFORMED CONSENT	28
3.1	Background.....	28
3.2	Free, prior and informed consent in IPBES assessments	29
4	THE ASSESSMENT CYCLE	30
4.1	Overview of indigenous and local knowledge activities and participation of indigenous peoples and local communities throughout the assessment cycle	30
4.2	Activities throughout the assessment cycle	36
4.2.1	Monitoring of participation and engagement.....	36
4.3	Stage 1: Scoping	36
4.4	Stage 2: Expert evaluation	36
4.4.1	Nomination and selection of experts	36
4.4.2	Developing key indigenous and local knowledge questions	38
4.4.3	Mobilizing written indigenous and local knowledge data and information	39
4.4.4	Methods for mobilizing written data, information and knowledge.....	40
4.4.5	Dialogue with indigenous peoples and local communities	42
4.4.6	Producing an assessment that includes indigenous and local knowledge	46
4.4.7	Review processes.....	47
4.5	Stage 4: Use of the final assessment findings	47
4.5.1	Outreach and uptake	47
4.5.2	Knowledge-policy dialogues	48
4.5.3	Catalyzing the mobilization of knowledge	48
	References.....	48

1 INTRODUCTION

1.1 Background and aims

This methodological guidance for recognizing and working with indigenous and local knowledge in IPBES assessments is intended as a resource for co-chairs, authors and technical support units working on IPBES assessments. It is also intended as a resource for indigenous peoples and local communities wanting to understand how they can participate in IPBES assessment processes. The guidance also contributes to IPBES' other three functions (knowledge and data, policy support tools and methodologies, capacity building), as discussed below.

The guidance was developed to support the implementation of the IPBES approach to recognizing and working with indigenous and local knowledge (hereafter “the approach to indigenous and local knowledge”), as set out in annex II to decision IPBES-5/1. Efforts have been made by co-chairs, authors, technical support units and partners from indigenous peoples and local communities to operationalise the approach as part of the preparation of IPBES assessments. The methodological guidance represents a work in progress and will evolve as new IPBES assessments and other activities further develop methods for engaging with indigenous peoples and local communities and indigenous and local knowledge.

The broad objectives of this methodological guidance include:

- Developing practical and appropriate methods to incorporate indigenous and local knowledge and issues concerning indigenous peoples and local communities into IPBES assessments that would “add value” to the research-based synthesis work carried out by authors of the assessment. In this way, the key findings of an assessment can be relevant to a wider suite of end users and decision makers;
- Piloting new approaches to enable active and meaningful participation of indigenous peoples and local communities at all stages of the assessment cycle, and setting up channels in which to build long-term relationships with indigenous peoples and local communities in the preparation of future IPBES assessments;
- Increasing the inclusiveness (process and content) of assessments by bringing in perspectives from representatives of indigenous peoples and local communities, especially those already involved with IPBES and other networks and organizations; and
- To enhance work on indigenous and local knowledge and participation of indigenous peoples and local communities in the other three functions of IPBES (knowledge and data, policy support tools and methodologies, capacity-building), as outlined in the approach to indigenous and local knowledge.

1.2 Contributions to the functions of IPBES

While this draft of the methodological guidance is structured around IPBES assessments, it contributes significantly to the other three functions of IPBES: knowledge and data, policy support tools and methodologies, and capacity building. In some cases, the methodological guidance itself represents a partial fulfilment of objectives of the approach regarding the other three functions (see subsections 1.2.1 to 1.2.3 below), in other cases the guide proposes methods and activities that support the objectives, for example through the development of databases of literature, experts and organisations.

It is anticipated that future versions of the methodological guidance will further develop work on the other three functions of IPBES and will further develop strategies and activities in this regard.

1.2.1 Knowledge and data

The methodological guidance contributes to the main aims of the IPBES approach to indigenous and local knowledge in relation to knowledge and data (paragraph 18 of the approach):

- *Identify a set of practices to help manage evidence and data that will be collected in the assessments;*
- *Facilitate the accessing and management of available sources of indigenous and local knowledge;*
- *Promote and catalyse the mobilization of indigenous and local knowledge, as appropriate, focusing on gaps that emerge during each phase of an assessment; and*
- *Take into account appropriately those aspects relevant to indigenous and local knowledge and indigenous peoples and local communities in the list of indicators, classifications of units of analysis and classification of nature's contributions to people.*

1.2.2 Policy support tools and methodologies

The methodological guidance contributes to the main aims of the IPBES approach to indigenous and local knowledge in relation to policy support tools and methodologies (paragraph 19 of the approach):

- *Identify, describe and facilitate the use of relevant tools and methods for implementing the four phases of the proposed approach; and*
- *Ensure that policy responses, decision-making instruments and processes relevant to indigenous and local knowledge and indigenous peoples and local communities are reflected in IPBES assessments.*

1.2.3 Capacity building

The methodological guidance contributes to the main aims of the IPBES approach to indigenous and local knowledge in relation to capacity building (paragraph 20 of the approach):

- *Identify, prioritize and build capacity critical to its implementation, within the means available, through, for example, training workshops and webinars on the approaches to and procedures for recognizing and working with indigenous and local knowledge in assessments or participation in the fellowship programme; and*
- *Promote and catalyse the undertaking of capacity-building activities in support of broader capacity-building needs; strengthen the ability of indigenous peoples and local communities to take part in, contribute to and benefit from IPBES deliverables.*

1.3 Structure of the methodological guidance

The guide is structured around the four stages of the IPBES assessment cycle, as laid out in the IPBES guide to assessments:

- **Stage 1:** Request and scope
- **Stage 2:** Expert evaluation
- **Stage 3:** Approval and acceptance of the final assessment report (not discussed in this guide as this is done by member states in the Plenary).
- **Stage 4:** Use of the assessment findings

The guide also follows the four phases of recognizing and working with indigenous and local knowledge in an IPBES assessment as set out in the approach to indigenous and local knowledge. They are:

- **Phase 1:** the collaborative definition of problems and goals
- **Phase 2:** synthesizing and incorporating a wide array of evidence and data from multiple sources of indigenous and local knowledge
- **Phase 3:** appropriately engaging indigenous peoples and local communities in the review of the various drafts of a specific assessment
- **Phase 4:** sharing knowledge and insights gained through an assessment with indigenous peoples and local communities once the assessment is concluded

1.4 Terminology

1.4.1 Indigenous and local knowledge

In para. 6 (a). of the IPBES approach to recognizing and working with indigenous and local knowledge, the following understanding is given:

Indigenous and local knowledge systems are in general understood to be dynamic bodies of integrated, holistic, social and ecological knowledge, practices and beliefs pertaining to the relationship of living beings, including people, with one another and with their environments. Indigenous and local knowledge is grounded in territory, is highly diverse and is continuously evolving through the interaction of experiences, innovations and various types of knowledge (written, oral, visual, tacit, gendered, practical and scientific). Such knowledge can provide information, methods, theory and practice for sustainable ecosystem management. Many indigenous and local knowledge systems are empirically tested, applied, contested and validated through different means in different contexts;

Para. 6 (c) of the approach states that the approach does not intend to create or develop new definitions of what constitutes “indigenous and local knowledge”, as these definitions are often context specific and vary within and across regions.

For the purpose of IPBES assessments, while maintaining the terminology used in the IPBES approach to indigenous and local knowledge it may be useful to add an emphasis on “practices”. The term “practices” is intended to highlight the direct contributions of indigenous peoples and local communities to the stewardship, monitoring, sustained use, management, governance and protection of nature, species and / or ecosystem. Practices, for example, could include how wild honey is collected, which requires bee tracking skills, species and ecosystems knowledge. Another example would be practices involved in rotational forest agriculture, which may require a wide range of knowledge including crop diversity, wild biodiversity, forest regeneration rates, soils and climate, as well as associated rituals, social systems and governance. In such a system, there may be an array of practices and associated knowledge which may be distributed between sexes, age-groups or other specializations within a given community. For the purposes of an assessment, it may be that only one part of the knowledge system generates relevant evidence, for example species knowledge, population trends or specific drivers, and this piece of ‘relevant’ knowledge needs to be recognized within the larger body of knowledge and practices which is sustained by the given community. Much of this knowledge may however be undocumented, or non-verbal, and may therefore be difficult for assessment authors to recognize or understand. The practices that are tied to this knowledge may however be more clearly visible, and their relationship to biodiversity more clearly apparent. A focus on both knowledge and practices may therefore provide authors with different avenues through which to approach a complex, tacit or undocumented knowledge system.

1.4.2 Indigenous peoples and local communities

Para. 6 (c) of the approach also states that the approach does not intend to create or develop new definitions of “indigenous peoples and local communities”, as these definitions are also often context specific and vary within and across regions.

Indigenous peoples and local communities (often referred to by the acronym “IPLC”) has become accepted terminology in many UN processes and organizations, including the Convention on Biological Diversity and the World Intellectual Property Organization (WIPO). The term was adopted by IPBES. It aims to describe both indigenous peoples and other communities who have close relationships to place and local natural resources for their daily living.

As with all such terms, there are a number of limitations and issues with its usage. These include the issue of how to define certain groups as “indigenous” and particularly who to define as “local”. These issues are discussed further below. Other issues include the amalgamation of “indigenous” and “local” and an implied flattening of the diversity within and between both groups. Some indigenous peoples contest the use of “local” and “indigenous” within the same conceptualization, seeing that this can often serve to undermine attention to the specificities of indigenous knowledge, practices and rights. The adoption of the United Nations Declaration on the Rights of Indigenous Peoples in 2007 further separates indigenous peoples from local communities, as it has given the United Nations a specific normative framework on engaging with indigenous peoples.

While some general definitions and guidelines are important, authors of IPBES assessments should be sensitive to the fact that definitions of “indigenous peoples and local communities” are usually context specific and should be recognized as such when evaluating data and literature. Authors of IPBES assessments should be sensitive to intra- and inter-regional differences in who and how indigenous peoples and local communities and indigenous and local knowledge are considered, aiming for inclusivity and diversity in reviewing available literature and documents.

By focusing assessment questions on specific issues (for example protected areas, agrobiodiversity, landscape management, food production, climate change, external pressures, nature’s contributions to people and quality of life, urbanization), it is expected that available evidence from the literature (peer-reviewed and technical) and diverse data and knowledge sources will help to provide a more inclusive picture of the state of biodiversity and ecosystems, trends and relevance for indigenous peoples and local communities in different regions of the world and also in relation to different resources or management systems. In practical terms, this means disaggregating literature review data to allow different interpretations of who and what to include as indigenous peoples and local communities.

1.4.3 Indigenous peoples and indigenous knowledge

Some groups of people are formally recognized as “indigenous” by their respective states and/or societies. The 2007 United Nations Declaration on the Rights of Indigenous Peoples (United Nations General Assembly 2007) also sets

out other considerations regarding whether a particular group of people can be considered as indigenous (see also Anaya 2012).

Many indigenous peoples have close relationships to their lands and waters and are bearers of knowledge of the environment passed down through generations. In certain regions of the world, however, a significant portion of indigenous populations may have been dislocated from their lands or communities of origin, or may have varying degrees of connection to lands, waters and natural resources due to cultural or environmental change. While indigenous and local knowledge can evolve and adapt to new locations and cultural contexts, the recognition of an individual or group as indigenous is not necessarily synonymous with the group or individual holding indigenous and local knowledge.

1.4.4 Local communities and local knowledge

IPBES emphasizes the inclusion of local knowledge and local communities and their connections and relationships to biodiversity. It should be noted however that uncertainty often remains as to who should be included in the category of “local” and what should be defined as “local knowledge”. Whereas there has been a great deal of work within the United Nations system on recognizing indigenous peoples and formalizing their rights and participation, this is not equivalent for local communities and their respective systems of knowledge.

In some cases, local communities may effectively have the same characteristics as indigenous peoples. Their knowledge may be formed through long-term relationships with the natural environment, often for generations, and may be associated with complex resource governance systems. In other cases, local communities may have a shorter history on a landscape but may still have a deep connection to lands, waters and biodiversity through their livelihoods, for example some farming or fishing communities. Local knowledge may also be conceived as knowledge that is generated by non-scientists who have a keen interest in some aspect of nature, such as bird-watchers, wild mushroom collectors, scuba divers, sports hunters and fishers, mountaineers, who have regular interaction with a species, landscape or seascape and are able to make contributions regarding data, trends and drivers. This is increasingly expressed through georeferenced data, whether through citizen science, application-based documentation, or community efforts to protect certain endangered species or ecosystems.

Local knowledge can therefore be thought of as existing on a spectrum, with much variation as to the extent to which an individual and / or group has accurate and reliable knowledge of local biodiversity. The essential characteristic that could be considered by IPBES is whether such communities have knowledge of biodiversity that can contribute to IPBES assessments and associated areas of work. This consideration of the knowledge of local communities may need to take place on a case by case basis. For the purpose of assessments, for example, the literature review phase and the selection of participants for dialogue workshops, it is recommended that a broad definition of who can be considered as ‘local’ is used, with the aim of accessing the best available knowledge relevant to that assessment.

However, the issues raised above about conflating “indigenous” and “local” communities should also be kept in mind, and local communities which are far removed in characteristics and history from indigenous communities may need to be approached accordingly. Overall, this methodological guidance is aimed at local communities with many similarities to indigenous communities, for example local communities which have expert levels of knowledge tied to close relationships with and reliance on local natural resources, for example artisanal fishers or farmers. Other approaches may need to be developed to adequately engage with the knowledge of industrial fishing or farming communities, sports hunters and fishers, citizen science practitioners, recreational users of nature and other groups.

1.4.5 Definitions of indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge

In the IPBES Approach to indigenous and local knowledge, three categories of expertise related to indigenous and local knowledge are distinguished:

- (a) “indigenous and local knowledge holders” are members of indigenous peoples and local communities who possess and practice indigenous and local knowledge;
- (b) “indigenous and local knowledge experts” are scientists, non-governmental organization representatives, or practitioners who are members of indigenous peoples and local communities but at the same time have experience in science and / or policy (they may also be indigenous and local knowledge holders); and

- (c) “Experts on indigenous and local knowledge” who are not members of indigenous peoples and local communities but have experience in working with indigenous peoples and local communities and studying indigenous and local knowledge.

2 THE IPBES PARTICIPATORY MECHANISM

2.1 Background

The participatory mechanism is integral to the IPBES approach to indigenous and local knowledge as outlined in annex II to decision IPBES-5/1. Its objective is to facilitate the effective and meaningful engagement of indigenous and local knowledge holders, indigenous and local knowledge experts and organizations or networks of indigenous peoples and local communities in order to strengthen their ability to contribute to and benefit from IPBES. The participatory mechanism is conceived as a series of activities for the participation of indigenous peoples and local communities throughout the IPBES assessment cycle and the streams of work related to the other three functions of IPBES, supported by a web-based platform that is currently in development.

This direct engagement with indigenous and local knowledge holders, indigenous and local knowledge experts and networks and organizations of indigenous peoples and local communities provides a crucial source of knowledge and information for IPBES assessments. Direct engagement also allows better control for indigenous peoples and local communities over the type of knowledge that is included in assessments, following principles of free, prior and informed consent (see below), and gives them a voice in how indigenous and local knowledge and indigenous peoples and local communities are represented and discussed within an assessment.

3 WORKING WITH FREE PRIOR AND INFORMED CONSENT

3.1 Background

Free, prior and informed consent (FPIC) is a specific right that pertains to indigenous peoples and is recognized in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). It allows indigenous peoples to give or withhold consent to a project that may affect them or their territories. Once they have given their consent, they can withdraw it at any stage. Furthermore, free, prior and informed consent enables them to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated.

The Conference of the Parties to the Convention on Biological Diversity adopted, in decision 16/18, voluntary guidelines for the development of mechanisms, legislation or other appropriate initiatives to ensure the “prior and informed consent”, “free, prior and informed consent” or “approval and involvement”, depending on national circumstances, of indigenous peoples and local communities for accessing their knowledge, innovations and practices, for fair and equitable sharing of benefits arising from the use of their knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity, and for reporting and preventing unlawful appropriation of traditional knowledge, which contain the following interpretation of free, prior and informed consent:

Free implies that indigenous peoples and local communities are not pressured, intimidated, manipulated or unduly influenced and that their consent is given, without coercion;

Prior implies seeking consent or approval sufficiently in advance of any authorization to access traditional knowledge² (indigenous and local knowledge) respecting the customary decision-making processes in accordance with national legislation and time requirements of indigenous peoples and local communities;

Informed implies that information is provided that covers relevant aspects, such as: the intended purpose of the access; its duration and scope; a preliminary assessment of the likely economic, social, cultural and environmental impacts, including potential risks; personnel likely to be involved in the execution of the access; procedures the access may entail and benefit-sharing arrangements;

² The Convention on Biological Diversity uses the term ‘traditional knowledge’, while IPBES has decided to use the term ‘indigenous and local knowledge’, in part to indicate that the knowledge of indigenous peoples and local communities can be dynamic and can adapt to new circumstances, as opposed to being a fixed body of knowledge set in a traditional past. However, there are strengths and weaknesses to each term, and none fully encompass the diverse knowledge systems to which they refer.

Consent or approval is the agreement of the indigenous peoples and local communities who are holders of traditional knowledge (indigenous and local knowledge) or the competent authorities of those indigenous peoples and local communities, as appropriate, to grant access to their traditional knowledge to a potential user and includes the right not to grant consent or approval;

Consultation and full and effective participation of indigenous peoples and local communities are crucial components of an informed consent or approval process.

3.2 Free, prior and informed consent in IPBES assessments

Authors of IPBES assessments have a responsibility to work as closely as possible with indigenous peoples and local communities, and to follow free, prior and informed consent principles.

Paragraph 11 of the approach to indigenous and local knowledge notes that:

Within the approach, free prior informed consent will be sought, as appropriate, for accessing indigenous and local knowledge, and the activities should not occur where they would prejudice the internationally recognized rights of indigenous peoples and interests of local communities [...]. Best practices and ethical guidelines, as appropriate, should be consulted to make decisions regarding the use of indigenous and local knowledge.

In general, the IPBES approach to indigenous and local knowledge and this methodological guidance aim to follow free, prior and informed consent principles, building as much as possible participation of indigenous peoples and local communities, information sharing and feedback and approval from indigenous peoples and local communities into IPBES assessment processes and other areas of work.

Where IPBES authors are working directly with indigenous peoples and local communities, for example during dialogue workshops, free, prior and informed consent principles should define the interactions and the ways that knowledge is used and represented, and consent should be sought especially for case studies that highlight a particular community or practice.

In the case of literature reviews, assessment authors should be attentive to the possibility that free, prior and informed consent may not have been properly sought by the authors of a published paper or report. If indigenous peoples and local communities raise concerns about information written about them, authors have a responsibility to follow-up with the indigenous peoples and local communities in question, and potentially the authors of the publication in question. If resolution cannot be met, IPBES authors may need to consider removing a publication from their analysis.

4 THE ASSESSMENT CYCLE

4.1 Overview of indigenous and local knowledge activities and indigenous peoples and local communities participation throughout the assessment cycle

The following table provides an overview of activities relating to indigenous and local knowledge and the participation of indigenous peoples and local communities that can take place during an IPBES assessment.

Activity	Aims and methods	Timing	<u>Coordinators / Participants</u>
Overall			
Oversight	The task force on indigenous and local knowledge, working with a technical support unit, oversees and facilitates the participation of indigenous peoples and local communities at all stages of the assessment cycle	Throughout assessment cycle	<u>Indigenous and local knowledge task force</u>
Monitoring the participation of indigenous peoples and local communities	A mechanism for monitoring of the participation of indigenous peoples and local communities at all stages – including indigenous and local knowledge expert participation within author groups, response rates to online calls, use of indigenous and local knowledge material in final assessment, etc.	Throughout assessment cycle	<u>Indigenous and local knowledge task force / technical support unit on indigenous and local knowledge / technical support unit for assessment / assessment co-chairs</u>
Stage 1: Scoping // Phase 1: Collaborative definition of problems and goals			
Requests for assessment topics	Networks of indigenous peoples and local communities specifically targeted and encouraged to request assessment topics	Within process for requesting topics	<u>IPBES secretariat, technical support unit on indigenous and local knowledge, other organizations</u> Networks of indigenous peoples and local communities, indigenous and local knowledge experts, experts on indigenous and local knowledge
Selection of experts for detailed scoping	<ul style="list-style-type: none"> Promoting nominations of indigenous and local knowledge experts and experts on indigenous and local knowledge to IPBES calls for nominations for the scoping expert group <i>A separate nomination process may be required for indigenous and local knowledge experts, with different selection criteria that do not necessarily prioritize publication records etc.</i> 	Within process for calls for nominations for scoping	<u>Multidisciplinary Expert Panel and Bureau, technical support unit on indigenous and local knowledge</u> Networks of indigenous peoples and local communities, indigenous and local knowledge experts, experts on indigenous and local knowledge

Activity	Aims and methods	Timing	Coordinators / Participants
Detailed scoping	<ul style="list-style-type: none"> Indigenous and local knowledge dialogue workshop for scoping of assessment Supporting the dialogue meeting by reaching out to networks of indigenous peoples and local communities to get input to scoping Supporting the online review of the scoping document by amplifying its reach, including through group reviews among indigenous peoples and local communities and strategic partners 	Scoping phase (dialogue workshop could be back-to-back with the general scoping meeting)	<p><u>IPBES secretariat, technical support unit on indigenous and local knowledge, strategic partners</u></p> <p>Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge</p>
Stage 2: Expert evaluation // Phase 2: synthesizing and incorporating evidence and data			
Nomination and selection of experts	<ul style="list-style-type: none"> Indigenous and local knowledge experts and experts on indigenous and local knowledge included within assessment expert groups (authors and reviewers) from the start of an assessment Relevant indigenous and local knowledge organizations and experts targeted by calls for nominations <i>Different selection criteria may be required for indigenous and local knowledge experts, which do not necessarily prioritize publication records etc.</i> 	During nomination and selection process for experts	<p><u>Multidisciplinary Expert Panel and bureau, IPBES secretariat, technical support unit on indigenous and local knowledge, strategic partners</u></p> <p>Networks of indigenous peoples and local communities, nominated indigenous and local knowledge experts</p>
Gap filling and contributing authors	<ul style="list-style-type: none"> Gap filling mechanism used for finding additional indigenous and local knowledge experts and experts on indigenous and local knowledge if needed Later, additional indigenous and local knowledge experts and experts on indigenous and local knowledge recruited as contributing authors <i>Different selection criteria may be required for indigenous and local knowledge experts, which do not necessarily prioritize publication records etc.</i> 	After initial nomination and selection process	<p><u>Assessment co-chairs</u></p> <p>Indigenous and local knowledge experts and experts on indigenous and local knowledge</p>
Fellowship programme	<ul style="list-style-type: none"> Early career indigenous and local knowledge experts (and experts on indigenous and local knowledge) engaged through the fellowship programme Nominations of indigenous and local knowledge experts actively sought from organizations, universities etc. <i>Different selection criteria may be required for indigenous and local knowledge experts, which do not</i> 	Alongside the nomination and selection process for experts	<p><u>Assessment co-chairs, technical support unit for capacity building, technical support unit on indigenous and local knowledge, strategic partners</u></p> <p>Indigenous and local knowledge experts and</p>

Activity	Aims and methods	Timing	<u>Coordinators / Participants</u>
	<i>necessarily prioritize publication records etc.</i>		experts on indigenous and local knowledge
Formation of indigenous and local knowledge liaison group	Indigenous and local knowledge experts and experts on indigenous and local knowledge selected from each chapter to form an indigenous and local knowledge liaison group. One assessment co-chair on the indigenous and local knowledge liaison group is ideal. Also resource persons, if needed.	Preferably before first author meeting	<u>Assessment co-chairs</u> Indigenous and local knowledge experts and experts on indigenous and local knowledge from within author teams
Planning meeting of the indigenous and local knowledge liaison group	Coordination and planning, distribution of work, operationalization of scoping document	During the first author meeting, or remotely soon after	<u>Assessment co-chairs, technical support unit for assessment, technical support unit for indigenous and local knowledge</u> Indigenous and local knowledge liaison group
Key indigenous and local knowledge question development	<ul style="list-style-type: none"> • <u>Indigenous and local knowledge dialogue workshop</u> (suggested for funding under the IPBES trust fund) • Online call for inputs • Side events at other meetings and conferences • Developing key questions for each chapter, highlighting key resources, discussing methods, discussing contentious issues if any, developing case studies 	Soon after or during indigenous and local knowledge liaison group meeting	<u>Indigenous and local knowledge liaison group, technical support unit for assessment, technical support unit for indigenous and local knowledge, other organizations</u> Indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Online call for contributions	Gathering key resources, including literature, names of organizations and experts	Soon after definition of key questions, open for six to eight weeks	<u>Indigenous and local knowledge liaison group, technical support unit for assessment, technical support unit for indigenous and local knowledge, other organizations</u> Indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Knowledge mobilization through direct engagement with indigenous	Mobilization of knowledge from indigenous peoples and local communities through local / national / regional indigenous and local knowledge dialogue workshops	During development of zero draft chapters and	<u>Strategic partners</u> Indigenous and local knowledge holders, indigenous and local

Activity	Aims and methods	Timing	<u>Coordinators / Participants</u>
peoples and local communities		before first order drafts	knowledge experts, experts on indigenous and local knowledge
indigenous and local knowledge literature review	Review of available literature, including grey literature on indigenous and local knowledge and indigenous peoples and local communities, also using existing IPBES database of indigenous and local knowledge materials (currently stored in Mendeley)	Soon after definition of key questions	<u>Indigenous and local knowledge liaison group, other authors</u>
Stage 2: Expert evaluation (cont.) // Phase 3: Review of drafts			
Reviewing first order drafts	<ul style="list-style-type: none"> • <u>Indigenous and local knowledge dialogue workshop</u> (suggested for funding under the IPBES trust fund) • Side events at other meetings and conferences • Discuss the first order drafts and provide feedback to authors, including gaps, and additional resources and experts • IPBES technical support units work with results of dialogue to produce and submit review comments 	At very beginning of the review period for the first order draft to allow integration of comments	<u>Assessment co-chairs, indigenous and local knowledge liaison group, technical support unit for assessment, technical support unit for indigenous and local knowledge, other organizations</u> Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Reviewing second order drafts and summary for policy makers	<ul style="list-style-type: none"> • <u>Indigenous and local knowledge dialogue workshop</u> (suggested for funding under the IPBES trust fund) • Side events at other meetings and conferences • Discuss the second order drafts and draft summary for policymakers and provide feedback to authors, including gaps, and additional resources and experts • IPBES technical support units work with results of dialogue to produce and submit review comments 	At very beginning of the review period for the second order draft and the draft summary for policymakers to allow integration of comments	<u>Assessment co-chairs, indigenous and local knowledge liaison group, technical support unit for assessment, technical support unit for indigenous and local knowledge, other organizations</u> Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Stage 3: Approval of final assessment			
Stage 4: Use of assessment findings // Phase 4: sharing knowledge and insights from an assessment with indigenous peoples and local communities			

Activity	Aims and methods	Timing	<u>Coordinators / Participants</u>
Communication and uptake strategy development	<ul style="list-style-type: none"> • ILK dialogue workshop on uptake for indigenous peoples and local communities • Develop a communication and uptake plan for producing specific materials for indigenous peoples and local communities from an assessment, including modes of outreach 	After approval of final assessment	<u>Other organizations, indigenous and local knowledge liaison group</u> Task force on indigenous and local knowledge, technical support unit for assessment or technical support unit for indigenous and local knowledge Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Products developed specially for indigenous peoples and local communities	<ul style="list-style-type: none"> • Developing complementary appropriate materials, which could include policy briefs, web pages etc. for indigenous peoples and local communities • Outreach to policymakers to develop the links between indigenous and local knowledge and policy 	After approval of final assessment	<u>Other organizations, indigenous and local knowledge liaison group</u> Task force on indigenous and local knowledge, technical support unit for assessment or technical support unit for indigenous and local knowledge Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Knowledge-policy dialogues	Dialogues between policy-makers and indigenous and local knowledge holders and indigenous and local knowledge experts on policy options and ways forward from IPBES assessment findings, at local / national / regional levels, depending on assessment	After approval of final assessment	<u>Other organizations,</u> Task force on indigenous and local knowledge, technical support unit for assessment or technical support unit for indigenous and local knowledge, indigenous and local knowledge liaison group Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and

Activity	Aims and methods	Timing	<u>Coordinators / Participants</u>
			local knowledge experts, experts on indigenous and local knowledge, policymakers
Support the use of the assessment findings	Support monitoring the implementation of the assessment findings where appropriate	After approval of final assessment	<u>Other organizations</u> Task Force on indigenous and local knowledge, technical support unit for assessment or technical support unit for indigenous and local knowledge, indigenous and local knowledge liaison group Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge, policymakers
Capacity building			
Long-term indigenous and local knowledge mobilization	Building capacity and supporting community-based monitoring and self-assessment schemes	Before, during and after assessment	<u>Other organizations</u> Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge
Long-term indigenous and local knowledge mobilization / policy processes	Building capacity of scientists and policy-makers to work with indigenous peoples and local communities and indigenous and local knowledge	Before, during and after assessment	<u>Other organizations</u> Networks of indigenous peoples and local communities, indigenous and local knowledge holders, indigenous and local knowledge experts, experts on indigenous and local knowledge, policymakers, scientific community

4.2 Activities throughout the assessment cycle

4.2.1 Monitoring of participation and engagement

There is currently no mechanism for tracking the direct participation of indigenous and local knowledge experts and experts on indigenous and local knowledge in the IPBES assessment process, and for tracking broader engagement of indigenous and local knowledge holders in the participatory mechanism. Monitoring and reporting regarding indigenous and local knowledge experts and experts on indigenous and local knowledge could take place for all stages of the IPBES assessment cycle, and where appropriate in other IPBES activities.

This could include monitoring success rates of indigenous and local knowledge experts and experts on indigenous and local knowledge being nominated and selected as authors, participation in online calls, and the quality of indigenous and local knowledge presented in final assessment reports (for example to what extent have key questions been answered). This monitoring and reporting process would be a key feature of the participatory mechanism. As much as possible, IPBES technical support units and co-chairs should aim to build monitoring of the participation of indigenous peoples and local communities when developing methods (for example noting number of dialogue participants from indigenous peoples and local communities, asking whether participants to on-line calls identify as members of indigenous peoples and local communities).

4.3 Stage 1: Scoping

Indigenous peoples and local communities should participate as much as possible during the scoping phase for assessments. Methods and participation of indigenous peoples and local communities for the scoping process could include:

- Before the scoping process takes place, networks of indigenous peoples and local communities could be specifically targeted and encouraged to request assessment topics;
- Developing key over-arching indigenous and local knowledge questions for an assessment;
- Promoting nominations of indigenous and local knowledge experts to IPBES call for nomination for the scoping expert group;
- Further developing the nomination and selection process to ensure that indigenous and local knowledge experts and experts on indigenous and local knowledge are selected into the scoping expert group;
- A specific indigenous and local knowledge dialogue workshop for scoping of an assessment (see Section 4.4.5.1 for a discussion of dialogue workshop methods);
- Using an online call for inputs and specially targeting networks of indigenous peoples and local communities to get input to scoping (see Section 4.4.5.3 for a discussion of online call methods); and
- Encouraging strategic partners to support the online review of the scoping document, including through group reviews among indigenous peoples and local communities.

4.4 Stage 2: Expert evaluation

4.4.1 Nomination and selection of experts

4.4.1.1 Expert nomination and selection processes

The selection of experts is overseen by the Multidisciplinary Expert Panel, in consultation with the Bureau. The Multidisciplinary Expert Panel must select a minimum of 80% of experts directly nominated by governments, while relevant stakeholders' nominations should comprise the other 20%.

A representation of indigenous and local knowledge experts and experts on indigenous and local knowledge may be desirable for assessment author groups. To facilitate this, calls for nominations should be distributed widely throughout networks of indigenous peoples and local communities and other relevant organizations. Potentially, expert selection processes may need to use different criteria for indigenous and local knowledge experts (for example not prioritizing publication records or an academic background), including for gap filling and contributing authors, as discussed below.

To participate in an assessment expert group it is necessary to have a good level of English (oral and written) and an in-depth knowledge of research processes. For this reason, the approach to indigenous and local knowledge recommends that indigenous and local knowledge experts (indigenous peoples and local communities who may be scientists, NGO representatives, or have experience in science and /or policy, but may also be indigenous and local knowledge holders) and experts on indigenous and local knowledge may be more able to participate actively in

assessment expert groups, while indigenous and local knowledge holders may be more appropriately engaged through dialogue workshops requiring specific, detailed knowledge at a more local level.

4.4.1.2 Gap filling mechanism

If gaps in geographical, gender and expertise balance in author teams are identified, the co-chairs of the assessments together with the Multidisciplinary Expert Panel and their respective coordinating lead authors can identify potential additional experts to fill these gaps. These experts will then be retroactively nominated following the approved procedure for filling gaps among groups of experts approved by the fourth session of the Plenary (decision IPBES-4/3, paragraph (a)).

This mechanism can be used to bring indigenous and local knowledge experts or experts in indigenous and local knowledge into expert groups, if the initial nomination and selection process has not provided the needed expertise for an assessment. Known experts can be specifically approached, or networks of indigenous peoples and local communities can be asked to recommend experts.

4.4.1.3 Indigenous and local knowledge liaison group

Once the authors for an assessment are determined, authors with indigenous and local knowledge expertise can be identified and invited to form the indigenous and local knowledge liaison groups for an assessment. One of the co-chairs of the assessment would ideally be on the indigenous and local knowledge liaison group. The global assessment's liaison group, for example, had 27 members.

The indigenous and local knowledge liaison group is tasked with including indigenous and local knowledge within chapters, developing and carrying out indigenous and local knowledge methods for the assessment (including online calls for inputs, dialogues, literature reviews, etc.), bringing in contributing authors where needed, developing cross chapter linkages, and developing overall indigenous and local knowledge narratives for an assessment. In this they would be supported by the technical support unit for the assessment and the technical support unit for indigenous and local knowledge.

The indigenous and local knowledge liaison group should aim to meet strategically throughout the assessment cycle, either remotely or during assessment author meetings.

There should be active communication and interactions between the indigenous and local knowledge liaison group and the indigenous and local knowledge task force (in part through the technical support unit on indigenous and local knowledge). Ideally, expert groups for an assessment will include members of the task force on indigenous and local knowledge, and this would ensure good linkages between the liaison group and the task force.

4.4.1.4 Contributing authors

It is important that the indigenous and local knowledge liaison group, chapter coordinating lead authors and indigenous and local knowledge-related authors help to identify potential contributing authors – preferably indigenous and local knowledge holders or indigenous and local knowledge experts – who can help to address information on indigenous and local knowledge from different regions of the world, as well as to identify relevant regional literature, data and data gaps, as well as organizations that could be involved in consultation processes (see Section 4.4.4.3 for a discussion of how contributing authors can be coordinated and contribute within an assessment). Chairs or authors of an assessment can also be asked to be contributing authors to a chapter on which they were not originally designated to work in the same assessment.

4.4.1.5 Fellowship programme

The IPBES fellowship programme is coordinated by the technical support unit for capacity building. The programme provides an opportunity for outstanding early-career individuals from all backgrounds and disciplines working on biodiversity and ecosystem services to participate in IPBES assessments. The fellowship programme may provide an avenue for young indigenous and local knowledge experts and experts on indigenous and local knowledge to be engaged in the authorship process for IPBES assessments.

Calls for nominations are sent out alongside the calls for nominations for assessment experts. A specific call could target indigenous peoples and local communities institutions, and nominations of indigenous and local knowledge experts (and experts on indigenous and local knowledge) could be actively sought from organizations, universities etc.

A separate selection process could be considered for indigenous and local knowledge experts, with criteria that do not necessarily prioritize an academic background or a record of publications.

4.4.1.6 *Roster of experts and organizations*

As part of the participatory mechanism, an online roster of experts and organizations working on indigenous and local knowledge will be developed. The global assessment's call for contributions (see Section 4.4.4.2) also produced a list of experts and organizations, which can be made available to new assessment expert groups.

4.4.2 *Developing key indigenous and local knowledge questions*

The development of key questions related to indigenous and local knowledge can help an assessment to frame its methods, data synthesis and writing relating to indigenous peoples and local communities and indigenous and local knowledge.

As much as possible, development of key indigenous and local knowledge questions should be done in close collaboration with indigenous peoples and local communities. Suggested methods include dialogue workshops with indigenous and local knowledge holders, indigenous and local knowledge experts, and experts on indigenous and local knowledge. Online calls for inputs may also help to frame and refine key questions (see Section 4.4.5.3 for methods).

Paragraph 13 of the approach to indigenous and local knowledge recommends that the development of key indigenous and local knowledge questions take place during the scoping phase. If this is not done during the scoping phase, it could take place as soon as possible within the assessment process, potentially soon after the formation of the indigenous and local knowledge liaison group for an assessment.

The approach to indigenous and local knowledge suggests that the following three overarching questions may be used and/or adapted as necessary to the specific subject of the assessment:

- (a) *What are the contributions of indigenous peoples and local communities in terms of their knowledge, practices and world views to the management and conservation of nature, the delivery of nature's contributions to people and ensuring a good quality of life at the regional and global scales?* This question is based on the accumulated evidence that indigenous and local knowledge is locally based, dynamic and shaped by innovation, but regionally manifested, and globally relevant.
- (b) *What are the most important pressures and factors undermining these contributions, as well as affecting the quality of life of present and future generations of indigenous peoples and local communities?* This question is based on accumulated evidence that in many regions of the world indigenous peoples and local communities are subjected to social, economic, political and environmental/ecological pressures, are largely marginalized, and experiencing high rates of social and environmental changes.
- (c) *What policy responses, measures and processes exist for strengthening and improving the governance of nature and nature's contributions to people with regard to indigenous peoples and local communities and their knowledge and practices?* This question recognizes an important role for indigenous peoples and local communities in supporting the global post-2020 biodiversity framework and the 2030 Agenda for Sustainable Development, including the Sustainable Development Goals.

Key indigenous and local knowledge questions can also be developed for each chapter (27 chapter specific indigenous and local knowledge questions were developed for the global assessment – the full list can be found in Annex 1). Each set of questions could aim to provide the foundation for subsequent chapters. These questions can be designed to provide a thread in analysis and narrative throughout the assessment, as well as cross-chapter storylines for topics related to indigenous peoples and local communities.

Given that indigenous and local knowledge systems are very diverse, it may help to cross-reference the question development with specific attention to indigenous livelihoods, ecosystems contexts and characteristics of biodiversity use, with attention to regional and local differences.

The questions can also articulate the macro and micro-analyses of contexts of indigenous and local knowledge or indigenous peoples and local communities, connecting the global trends with specific cases at the regional, national and local level as necessary. As such, they can also aim to mobilize multiple forms of evidence. These questions can also aim to help to identify gaps in data, knowledge, and regional representation of indigenous and local knowledge and indigenous peoples and local communities.

4.4.3 *Mobilizing written indigenous and local knowledge data and information*

Mobilizing written indigenous and local knowledge information is highly important for IPBES assessments, as efforts to engage directly with indigenous peoples and local communities will be limited to a great extent by time and budget restraints. Mobilizing written indigenous and local knowledge information will mostly be done during the expert evaluation phase of an assessment, although it may also take place during the scoping phase.

4.4.3.1 *Potential sources of written indigenous and local knowledge data and information*

In order to better engage with indigenous and local knowledge, IPBES assessments can include a wide array of evidence and data from multiple sources. In particular, IPBES assessments can consider forms of literature beyond peer-reviewed scientific literature. Grey literature (for example, technical reports, policy briefs, or case study compilations) can be a vital complement to peer-reviewed references as they can contain a great deal of information about indigenous and local knowledge and indigenous peoples and local communities. In particular, materials that indigenous peoples and local communities have produced themselves at the community or organization level may often take the form of grey literature rather than peer reviewed scientific literature.

As such, sources of written information that can be included in IPBES assessments include a wide array of evidence and data from multiple sources:

- (a) Peer-reviewed literature and synthesis reports (for example, standard literature search in indexed journals, search engines, etc.).
- (b) Compilation of literature, data and cases from other IPBES assessments and related reports, such as the “*Outlook on Biodiversity: Indigenous Peoples’ and Local Communities’ Contributions to the Implementation of the Strategic Plan for Biodiversity 2011-2020*” part of the Convention on Biological Diversity’s 4th Global Biodiversity Outlook, among others.
- (c) The compilations of case studies presented in the *Proceedings of the IPBES Indigenous and Local Knowledge Dialogue Workshops* carried out for the pollination assessment and regional assessments.
- (d) Compilation of reports and data from international research centres and institutions (for example the Food and Agriculture Organisation (FAO), Center for International Forestry Research (CIFOR), the World Agroforestry Centre (ICRAF), the research programme on Climate Change, Agriculture and Food Security (CCAFS), etc.) and relevant regional centres.
- (e) Compilation of spatially explicit data and geospatial data sources, for example, Convention on Biological Diversity, World Resources Institute (WRI), The Amazon Geo-Referenced Socio-Environmental Information Network (RAISGs), International Union for the Conservation of Nature (IUCN), UNESCO, UNEP World Conservation Monitoring Centre (WCMC), UNEP-Arendal, Community-Based Monitoring and Information Systems (CBMIS), satellite data, archival maps, and many others.
- (f) Compilations of knowledge and materials produced and selected by indigenous peoples and local communities themselves.
- (g) Compilations of knowledge and materials produced by indigenous and local knowledge experts for use by networks of indigenous and local knowledge custodians and others working with indigenous peoples.

4.4.3.2 *Languages and written information*

It should be noted that many relevant sources of written information may not be published in English. Recent research suggests that over a third of new conservation science documents are published in languages other than English, despite the assumption of English as the scientific “lingua franca” (Amano et al. 2016). These figures are arguably higher in the case of indigenous and local knowledge literature, which is often unavailable in English, and is instead published in local languages relevant to indigenous peoples and local communities themselves (McElwee et al. in press). Participants at IPBES indigenous and local knowledge dialogue workshops have also highlighted that information on their communities (both peer-reviewed and grey literature, including reports that the communities have produced themselves) is often not published in English. Working mostly with English literature can therefore contribute to biases in global understanding of indigenous and local knowledge. Ideally, author teams should be as multi-lingual as possible to allow access to non-English publications. Other mechanisms may also need to be developed to engage with non-English materials, especially in relation to indigenous peoples and local communities.

4.4.3.3 Knowledge encoded in non-written forms

As noted in the approach to indigenous and local knowledge, much indigenous and local knowledge may not exist in written formats, and may instead be in forms such as ritual, ceremony, dance, song and visual manifestations, including symbols, documentaries and artwork. The variety of formats and the difficulty of accessing them pose a major challenge for their inclusion in IPBES assessments (See also Section 4.4.6.2 for a discussion of methods). Sometimes knowledge holders have not recorded their knowledge in any form, or their knowledge has been transmitted in a non-tangible form. Dialogues with indigenous and local knowledge holders and indigenous and local knowledge experts (discussed below in Section 4.4.5.1) can to an extent begin the process of accessing a small portion of this knowledge. Catalysing research with indigenous and local knowledge holders may also begin to address this challenge more effectively in the long term (see Section 4.5.3).

4.4.4 Methods for mobilizing written data, information and knowledge

There are various methods available to IPBES authors that they can use to access the sources of written information listed above. As discussed below, systematic literature reviews may not provide a good representation of all the written information available about indigenous and local knowledge and indigenous peoples and local communities, as much of this knowledge may be contained in grey literature. It is therefore recommended that this method is complemented by other more targeted methods.

Table 2: From reflections on the Pollination Assessment, this table explores the potential differences between performing a systematic literature review and an indigenous and local knowledge review (Hill 2016).

Systematic review: origins medical science		indigenous and local knowledge review: origins historiography	
Feature	Mechanism	Feature	Mechanism
Many studies in peer-reviewed journals	Specify data bases to be searched e.g Web of Science, etc.	Widely dispersed in communities, art, music, grey literature, books, journals	Identify the richest and best sources through experts (workshops and goal-specific collection)
Access moderated through markets	Work with academic institutions who have paid for access	Access moderated through customary law and markets (Free Prior and Informed Consent)	Work with indigenous and local knowledge organizations to develop free, prior and informed consent and academic institutions who have paid access
Studies of diverse quality	Specify attributes for example meta-analyses, large samples	Studies of diverse quality in diverse literatures	Attribute sets: for example indigenous and local knowledge self-representation (in); obvious racism (out); many cases (in)
Studies aim to provide the relevant information	Search terms on specific fields and sources (replicable)	Relevant information may be incidental to study aim	Analytical framework to guide the search
Confidence about quality & quantity of evidence	Assessed by experts at IPBES meetings	Confidence from the co-production of information	Engage indigenous and local knowledge holders / indigenous and local knowledge experts throughout the process

4.4.4.1 *Indigenous and local knowledge materials database*

A database of papers, reports and other materials collected during the global assessment, the regional assessments and the land degradation assessment is now available in a searchable repository, with more than 1200 academic articles, reports, websites, and videos in about 15 languages, some of which are indigenous. This is available to authors of new assessments and can be added to by new calls for contributions (see below), or by authors of assessments after literature reviews, dialogue workshops and other knowledge collection activities.

4.4.4.2 *Online call for contributions*

An on-line call for contributions can be employed for IPBES assessments, to mobilize information and locate networks, organizations and experts that might otherwise have been unknown.

Goals:

- (a) Identify and compile key sources of knowledge, data and information that might otherwise be unavailable to authors (including scientific literature on indigenous and local knowledge, reports, grey literature, datasets, videos);
- (b) Identify possible key partners and/or contributing authors including networks and organizations of indigenous peoples and local communities, and individual indigenous and local knowledge experts, experts on indigenous and local knowledge and indigenous and local knowledge holders;
- (c) Increase visibility of an assessment.

Target partner: a wide range of networks and/or stakeholders including those from governments, academia, civil society at large, and indigenous peoples and local communities (through organizations and networks of indigenous peoples and local communities, and indigenous and local knowledge experts).

Method: the indigenous and local knowledge liaison group can develop a proposed call for contributions, requesting information along key themes relevant to the assessment, organised around different broad, cross-cutting topics, or by assessment chapter. The call for contributions invites materials including information about publications and reports, data, information about organizations, and names of individual experts working on indigenous and local knowledge, etc. It could be available in English, Spanish and French where possible, to reach a wider audience who may not use English as a first language. This would be pre-tested and distributed widely by the secretariat.

Timing: As soon as possible within the assessment process once the indigenous and local knowledge liaison group and the key indigenous and local knowledge questions are developed.

Strengths: This method is useful for accessing grey literature and other forms of information that may not be available through a systematic search of peer-reviewed literature. It is also useful to reach a wider and heterogeneous constituency (both of individuals and organizations related to indigenous peoples and local communities, academics, and practitioners), to create new networking possibilities, and to extend the dissemination and recognition of IPBES activities. The information received on organizations and experts can be used to identify new aspects not yet covered in the assessment; it can also be useful to identify contributing authors for the different chapters.

Weakness: Participation may be biased towards academics, researchers and organisations, rather than indigenous and local knowledge holders.

4.4.4.3 *Systematic literature reviews*

Systematic literature reviews can be used to bring peer-reviewed indigenous and local knowledge literature into an assessment.

Method: Systematic reviews can be conducted of peer-reviewed literature using specific search term-based reviews in Web of Science, Scopus, Google Scholar, etc. However, a lack of proper key words to capture the complexity of the issues being analyzed can require that further searches and reviews are required. For example, in the global assessment, a section on the contributions of indigenous peoples and local communities to biodiversity, its management and protection used specific terms (including *nature conserv**, *biodiversity*, *cultural landscape*, *biocultural diversity* and others) to cover the ecological aspects of these contributions, but additional searches had to be run and a careful examination of the reference lists of the reviewed publications had to be made to find the most relevant local cases (McElwee et al, in press).

Groups of invited experts (contributing authors) can also be coordinated to conduct systematic literature reviews focusing on indigenous and local knowledge around specific topics. To ensure homogeneity, the chapter leadership team can provide specific guidelines on how the literature review should be conducted (for example by specifying search terms) and how to organize the information (for example around a series of questions, and within a word limit). Contributing authors can also be asked to complement the text and the list of references with references and ideas from their own work, and to provide a case study to illustrate any of the questions. The text produced by the contributing authors can then be sent to 3-4 experts on the topic for external review (McElwee et al. in press).

Strengths and weaknesses: This type of analysis may produce the richest and broadest overviews of global research about indigenous and local knowledge. However, often it does not capture the views of indigenous peoples and local communities themselves, but rather the analysis of the scientific community, and much of the grey literature and other forms of data and information relating to indigenous and local knowledge will be missed.

4.4.5 *Dialogue with indigenous peoples and local communities*

Dialogue with indigenous peoples and local communities is a crucial method for mobilizing indigenous and local knowledge data and information for IPBES assessments, and it should be used to strategically complement the reviews of written information discussed above.

Key methods for dialogue with indigenous peoples and local communities during an IPBES assessment include:

- (a) Face-to-face dialogues with indigenous and local knowledge holders, indigenous and local knowledge experts and experts on indigenous and local knowledge during in-depth workshops over a day or more
- (b) Face-to-face information and results sharing with representative networks and organizations of indigenous peoples and local communities
- (c) Online calls for inputs

These activities all have strengths and weaknesses and together will increase the extent to which indigenous and local knowledge is included in an assessment, and the extent to which indigenous peoples and local communities are adequately consulted and informed during the assessment process. These mechanisms do not represent the only activities that can take place within the context of an assessment. They are discussed in turn below.

4.4.5.1 *Face-to-face dialogues with indigenous peoples and local communities*

In-depth dialogues lasting one or more days between indigenous and local knowledge holders, indigenous and local knowledge experts, and experts on indigenous and local knowledge, can provide a fora in which indigenous peoples and local communities can provide input to, review and potentially co-produce content for an assessment.

To the extent possible, these dialogues would be planned in collaboration with partner networks and organizations of indigenous peoples and local communities, which would also facilitate these dialogues.

Goals: The intent of these dialogues is to carry out face-to-face discussions on specific issues or themes and/or products (chapters, chapter sections, summary for policymakers) relevant to an assessment. This type of consultation provides an opportunity for more in-depth discussion regarding specific chapter content (e.g. protected areas, agrodiversity, knowledge loss, etc.) in addition to reviewing key findings of the chapter executive summaries and the overall summary for policymakers.

Potential participants:

- Indigenous and local knowledge holders
- Indigenous and local knowledge experts (including researchers; representatives of organizations / networks of indigenous peoples and local communities)
- Experts on indigenous and local knowledge
- Indigenous and local knowledge liaison group and interested authors

Methods: These events can be organised directly by IPBES, or can be arranged and defined in partnership with other organisations. They may involve co-production of specific content and/or review-consultation of pre-existing content of the chapters, with the involvement of participants attending such events. As much as possible, participants and networks of indigenous peoples and local communities should be involved in defining the agenda and framing the discussions from the start of the organisation process. Participants could include ad-hoc invitees suggested by the

organization or network of indigenous peoples and local communities supporting the organization of the dialogue. These events can also help to expand the network of engagement with indigenous peoples and local communities that will continue during an assessment and longer-term.

Follow-up to dialogue workshops will also be important – working with participants to develop recommendations, case studies and a report from the meeting, and eventually following up to explain how the information was used in the assessment.

If the dialogue is with indigenous and local knowledge holders this would ideally be organized in a venue that provides an enabling environment to the indigenous and local knowledge holders. Budget constraints may limit the ability of authors to take part in these type of activities, though extra funding could be sought from other organizations.

Where funding is not available for an IPBES workshop, authors can also attend relevant events organised by other organisations. At these events, questions relevant to the assessment can be raised by authors for discussion. There may also be opportunities for one-on-one interviews with participants from indigenous peoples and local communities on the side-lines of these meetings.

Timing: Timing of face-to-face dialogues can vary, depending on the goals of the consultation. Earlier in the assessment process they are more likely to provide direction to authors and identify gaps and new resources. Later in the assessment process they may be useful methods for reviewing assessments with indigenous peoples and local communities (see Section 4.4.7).

Strengths: Face-to-face dialogues offer more opportunities than most methodologies for engaging in a meaningful way with indigenous and local knowledge holders, indigenous and local knowledge experts and experts on indigenous and local knowledge and gaining knowledge and insights that can be incorporated into an assessment. They also give time for participants to engage with materials that are presented, offering feedback and advice on an assessment.

As these meetings specifically invite indigenous peoples and local communities, they can be considerably more effective than online processes in engaging indigenous and local knowledge holders, as online processes may often be more used by researchers and organisations. Moreover, collaboration between assessment authors and other organizations and networks has the potential to extend the reach of consultations to different regions of the world.

Dialogue workshops can also function as capacity building activities – helping indigenous and local knowledge holders and indigenous and local knowledge experts to see the value of their knowledge, and to understand how their knowledge could be used in research processes, while also building interest and capacity among IPBES authors.

Weaknesses: The number of participants that can take part in face-to-face dialogues will be limited due to budget and timeframe constraints reducing the likelihood of an overall global/regional and sociocultural representation.

Workshops within communities, or learning and sharing processes involving extended periods engaging with indigenous and local knowledge holders on their lands or waters, may be the best ways for authors to gain in-depth knowledge and insight from indigenous and local knowledge holders. Budget and time restrictions may however limit the ability of authors to participate in such activities. IPBES and its assessments can however aim to stimulate more on-the-ground research with and by indigenous peoples and local communities, through capacity-building activities, highlighting knowledge gaps, and influencing policy (see Section 4.5.3 for a discussion on catalyzing new research).

4.4.5.2 Face-to-face information sharing and/or input seeking with representative networks and organizations of indigenous peoples and local communities

Short information sessions can take place within the framework of larger meetings and events, such as meetings of the Convention on Biological Diversity Conference of the Parties, the United Nations Permanent Forum on Indigenous Issues, or other large summits and conferences that will be attended by indigenous and local knowledge experts, experts on indigenous and local knowledge and potentially indigenous and local knowledge holders.

Goals: Disseminating information about the assessment, its timetables, and goals. Establish connections with individuals and networks. Gain input on specific questions relating to an assessment.

Potential participants:

- Indigenous and local knowledge experts (including leaders of organizations of indigenous peoples and local communities attending the framework meeting or conference)

- Indigenous and local knowledge holders (if they are attending the framework meeting or conference)
- Experts on indigenous and local knowledge
- Indigenous and local knowledge liaison group

Methods: 1- to 2-hour events presenting plans for the development of an assessment to participants. These events will have more of an emphasis on information sharing and stimulating interest in the assessment. There could be an emphasis on inviting input regarding the indigenous and local knowledge in the assessment, discussing future opportunities for participation (specifically the external review periods) and more localized consultations, and nurturing an engaged network of indigenous peoples and local communities that will continue during the assessment and longer-term.

Of note is that the global assessment has developed a good relationship with the United Nations Permanent Forum on Indigenous Issues, by attending their annual meetings, giving updates in the plenary and holding side events. This relationship could be continued and further developed by future IPBES assessments.

Timing: These sessions can take place at any stage in the assessment process, and can be tailored towards sharing information relevant to the assessment at any given stage (for example scoping, review periods, post-assessment outreach)

Strengths and weaknesses: Short face-to-face information activities are good ways of sharing information about IPBES and the assessment, and in some cases to collect input during the scoping phase of the assessment. Within the time limit of one to two hours it is unlikely that detailed knowledge and information will be gained, although key connections can be made to resources and experts that can be pursued after the information-sharing session.

Also, these larger events may primarily involve indigenous and local knowledge experts and experts on indigenous and local knowledge already engaged in global fora (such as the Convention on Biological Diversity or academic conferences) and thus indigenous and local knowledge holders still practicing indigenous and local knowledge and not already partnering with global institutions may not be reached in this way.

4.4.5.3 Online calls for inputs

An online call for inputs can be used to reach out to and consult with a broad range of indigenous and local knowledge holders, experts on indigenous and local knowledge and indigenous and local knowledge experts, who might not otherwise be aware of or engaged in an IPBES assessment.

Goals:

- (a) Addressing any key questions or topics that require particular attention;
- (b) Increase visibility of an assessment;
- (c) Identify possible key partners and/or contributing authors;
- (d) Identify key sources of data and information.

Participants: A wide net of networks and/or stakeholders including those from governments, academia, civil society at large, and indigenous peoples and local communities (through organizations and networks of indigenous peoples and local communities, and indigenous and local knowledge experts); if and where possible partners would be encouraged to amplify the reach and feedback to the online call for inputs.

Method: The indigenous and local knowledge liaison group can develop an online call for inputs, and this may be most effective if done in collaboration with partners such as the Satoyama Initiative or relevant networks of indigenous peoples and local communities that have good experience of reaching out to their networks to collect key pieces of information. As much as possible, key partners and networks of indigenous peoples and local communities could be engaged in framing the questions and planning the distribution of the call for inputs. Specific questions sent to strategically chosen recipients may generate more detailed responses than broad questions disseminated widely. The call for inputs would be pre-tested and distributed by the secretariat. The call for inputs could request inputs to the guiding questions of the assessment as well as on publications and data, organizations and networks, and individuals. Ideally, such calls would be translated into at least the three United Nations languages – other languages may be necessary if specific regions are targeted.

Timing: When refinement of key questions is needed; when gaps in knowledge or information become apparent; during the development of first order drafts.

Strengths and weaknesses: Online calls for inputs may be useful to reach a wider and heterogeneous constituency (both of individuals and organizations related to indigenous peoples and local communities, academics, and practitioners), to create new networking possibilities, and to extend the dissemination and recognition of IPBES activities. Online call for inputs, however, may be limited in terms of depth of content provided. Furthermore, participation is likely to be biased towards researchers and academics working on indigenous and local knowledge (indigenous and local knowledge experts and experts on indigenous and local knowledge) rather than indigenous and local knowledge holders or local level organizations of indigenous peoples and local communities. This can be remedied to an extent by close collaboration with networks of indigenous peoples and local communities, and targeted distribution and follow-up, and carefully designed framing of questions.

4.4.5.4 *Who should be engaged?*

There are many challenges in engaging holders of local, often contextualized knowledge in global or regional scale assessments, and the participants for different activities need to be carefully considered.

Key issues to consider include:

- How specific is the knowledge sought? Does the assessment (or part of an assessment) require in-depth detailed knowledge on a specific subject, or more general information about indigenous and local knowledge and indigenous peoples and local communities?
- At what scale is the knowledge being sought? Does the assessment (or part of an assessment) require detailed knowledge from specific localities (which can then be up-scaled or used as case studies), or does it require an overview of indigenous and local knowledge and indigenous peoples and local communities at a global or regional scale?
- What is the nature of the knowledge being sought? For example, does the assessment (or part of an assessment) require detailed information about an ecosystem, or does it require information about how indigenous peoples and local communities are engaging in policy processes at the national or regional level? Is the aim to provide knowledge to an assessment, or to provide feedback on what has been written during the review process? Is the aim to co-write sections of the assessment, or gain an overview of the concerns of indigenous peoples and local communities?
- How much time and budget does an assessment have for these types of activities? There may be a limited amount of activities that can take place within the time and budget limitations of an assessment – careful consideration needs to be given as to how to achieve the best representation of knowledge across the scales and themes of an assessment.

While indigenous and local knowledge holders may provide the most detailed information on specific subjects, this may be highly localized and contextualized. Accessing communities on the ground can also be time consuming and expensive, and as a result getting a good representation from across a region or globally can be a challenge.

Indigenous and local knowledge experts and experts on indigenous and local knowledge may provide less detailed knowledge and information, but they may be able to provide more general information about a country or region, particularly if they are involved in coordinating networks or research, and more information on connections between local level knowledge and practices and national or international policy.

Networks of indigenous peoples and local communities may also be invaluable partners in finding the appropriate participants to be in different roles at different phases of the assessment cycle. Some networks of indigenous peoples and local communities also have experience in pushing key questions or calls for inputs out through their networks to get targeted responses.

Networks and organizations of indigenous peoples and local communities include: the IPBES centres of distinction on indigenous and local knowledge, the Convention on Biological Diversity-related International Indigenous Forum on Biodiversity (IIFB), Indigenous Partnership for Agro-biodiversity and Food Sovereignty, regional networks such as Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica (COICA), Indigenous Peoples of Africa Coordinating Committee (IPACC), Mesoamerican Alliance of Peoples and Forests, Russian Association of Indigenous Peoples of the North (RAIPON), Asia Indigenous Peoples Pact (AIPP), to cite only very few.

Organizations and networks that work with indigenous peoples and local communities and indigenous peoples and local communities issues may also be invaluable partners. Such organizations and networks include the Indigenous and Conserved Communities Areas (ICCA) Consortium and Forest Peoples Programme (FPP).

4.4.6 *Producing an assessment that includes indigenous and local knowledge*

4.4.6.1 *General principles*

As with the rest of this methodological guidance, the theme of the assessment and its structure may affect the approach to writing and representing indigenous and local knowledge that authors may choose to take.

In general, where relevant, information and data could be considered through a ‘multiple evidence-based approach’, an approach that: “proposes parallels whereby indigenous, local and scientific knowledge systems are viewed to generate different manifestations of knowledge, which can generate new insights and innovations through complementarities. The multiple evidence-based approach emphasizes that evaluation of knowledge occurs primarily within rather than across knowledge systems. The multiple evidence-based approach on a particular issue creates an enriched picture of understanding, for triangulation and joint assessment of knowledge, and a starting point for further knowledge generation” (Tengö et al. 2014, also Tengö et al. 2017).

As much as possible the synthesis and writing stages of an IPBES assessment could follow the later stages of the process for collaborating across diverse knowledge systems (translate, negotiate, synthesise, apply) recommended by Tengö et al. 2017.

Agreeing on the appropriate validation mechanisms between knowledge systems (Lofmarck & Lidskog 2017) remains an ongoing process for IPBES, and expert groups should pay particular attention to this issue. In general, as far as possible, validation should be undertaken by indigenous peoples and local communities themselves, rather than by outside researchers.

IPBES assessments should seek to balance large-scale synthesis and spatial up-scaling (literature and geospatial data sources) with a rich illustration of cases from different parts of the world (such as the practices, worldviews, voices, and faces of indigenous peoples and local communities). An important role of the indigenous and local knowledge liaison group during the analysis and writing phase is to up-scale experiences learnt from local case studies, so they may be used throughout the assessment. However, many challenges remain in this balance between contextualized knowledge and large-scale synthesis, and there is a lack of knowledge up-scaling mechanisms (McElwee et al. in press). Challenges include that indigenous and local knowledge can become ‘flattened’ and decontextualized through synthesis if not careful (Lofmarck & Lidskog 2017) or be missing components when disassociated from institutions used to manage indigenous and local knowledge on the ground (Tengö et al. 2017).

4.4.6.2 *Presenting indigenous and local knowledge in an assessment*

It may be preferable that indigenous and local knowledge is used throughout an assessment text, rather than only appearing in boxes or as case studies. However, boxes and case studies may be used to represent specific cases that illustrate or provide added context to a theme, and may greatly enrich the more generalized knowledge used in the main assessment text.

There are challenges in giving value and attention to other forms of knowledge materials (for example artworks, songs) in a written assessment. However, artworks or songs can demonstrate a different worldview and give value to other forms of representing knowledge, and therefore there can be value in including them, as was done in the pollination assessment. Another example is a graphic of an indigenous seasonal calendar, which was included in the land degradation assessment summary for policymakers. Free prior and informed consent is usually essential if art, songs or other knowledge forms are to be represented in an assessment.

4.4.6.3 *Cross-chapter narratives*

The first chapter can provide a global overview of who indigenous peoples and local communities are, their populations and distribution, why they are important, and the lands and ecosystems that they manage. Chapter 1 can also set the scene of the importance of indigenous peoples and local communities in relation to the theme of the assessment.

The key indigenous and local knowledge questions developed at the beginning of the expert review process can be a frame of reference and a guide for developing cross-chapter narratives during the writing phase of the assessment, and

can also function as an internal review and monitoring mechanism for authors as their chapters develop, seeing to what extent the questions have been answered, and where gaps remain.

4.4.6.4 Scenarios

There can be major challenges in incorporating lessons from indigenous and local knowledge in scenario development, as the literature does not show many scenario building exercises that have included the participation of indigenous peoples and local communities. There are also few scenario papers that directly or explicitly address issues relating to indigenous peoples and local communities. The IPBES scenarios and models expert group of IPBES has however included indigenous peoples and local communities in its participatory approach to scenario development and will continue to do so, and may be a resource for the future.

4.4.7 Review processes

External reviews of first and second order drafts of assessments are conducted by making the drafts available online on the IPBES website and inviting comments by reviewers.

Calls for participation in the review processes can be distributed widely through email lists aimed at indigenous peoples and local communities, encouraging engagement in reviews. Collaboration among indigenous peoples and local communities or their organizations to create group consensus comments could be encouraged.

Individuals and organizations who participated in the original online call for contributions can also be specifically invited and encouraged to participate in the reviews.

Dialogue workshops aimed at engaging indigenous peoples and local communities in reviews may also be important, as many indigenous and local knowledge holders and indigenous and local knowledge experts have reported that they do not have the time or resources to participate in online reviews of long documents. These workshops can be opportunities for assessment authors to explain or highlight particular sections of an assessment, or to give an overview of an entire assessment, and receive feedback from participants. Participants from indigenous peoples and local communities can then be encouraged to engage in the review process. Alternatively, review comments documented during a review workshop can be submitted by the workshop organizers / the technical support unit for indigenous and local knowledge / the technical support unit for the assessment, indicating in the comment form the names of the participants that provided the comments. Section 4.4.5.1 gives a discussion of dialogue workshop methodologies.

4.5 Stage 4: Use of the final assessment findings

4.5.1 Outreach and uptake

4.5.1.1 Background to IPBES procedures

The summary for policymakers, in all United Nations languages, and the chapters in English are prepared for the Plenary, formatted as Plenary documents.

In addition, the following materials have been published by the IPBES communications team:

- (a) a short (1 minute) 'teaser' video with top-line key messages
- (b) the 'laid-out' summary for policymakers - English only (printed and electronic)
- (c) the "laid-out chapters" (printed and electronic)
- (d) a short deck of presentation slides (+/- 10) with key messages and policy options, and
- (e) a professional outreach video (about 5 minutes each) narrated in English with subtitles in all 6 United Nations languages.

4.5.1.2 Outreach and uptake specific to indigenous peoples and local communities

Participants of IPBES indigenous and local knowledge dialogue workshops³ have highlighted that IPBES assessments can be invaluable tools for indigenous peoples and local communities, but that specific products would need to be created in order to enhance their use and uptake. They highlight that this would need a dedicated strategy and funding, and that partner organizations would be invaluable. They also noted that products that address issues related to

³ See for example the IPBES Dialogue Workshop on Arctic Indigenous Knowledge, Meeting Overview, June 6-8, 2018, University of Helsinki, Helsinki, Finland

indigenous peoples and local communities could be used as tools by indigenous peoples and local communities in discussions with government or other stakeholders.

Suggestions for products include:

- Posters and fact sheets based on the assessment;
- Toolkits (training manuals, guidelines);
- Websites that allow specific themes or narratives of an assessment to be tracked and synthesized;
- Educational and information materials;
- Key messages with images adapted for social media.

The limited number of languages that IPBES products are currently available in was also highlighted as a major limitation in terms of use and uptake by many indigenous peoples and local communities.

Following free, prior and informed consent principles, where there has been direct interaction with indigenous peoples' organizations, appropriate follow up after the assessment is published should take place. This may include sending a copy of the summary for policymakers to the community organization or representative, or a dialogue on the outcomes and key findings of the assessment. Indigenous peoples who invest in an assessment may want to understand their opportunity to follow up at the national level as the policy process develops after the assessment is released.

4.5.2 Knowledge-policy dialogues

There may be opportunities for organizing post-assessment dialogues between policy-makers and indigenous and local knowledge holders and indigenous and local knowledge experts, which would aim to explore policy options and ways forward from IPBES assessment findings, at local, national or regional levels, depending on the assessment. The BES-Net Dialogues and a series of workshops taking place for the Asia-Pacific regional assessment are examples of post-assessment knowledge-policy processes that include indigenous peoples and local communities.

4.5.3 Catalyzing the mobilization of knowledge

IPBES authors cannot conduct new research as part of an assessment. IPBES assessments can however catalyze new research, by identifying gaps in knowledge (for example indigenous and local knowledge in scenario building), or by recommending a focus on new or existing but under-used methodologies (for example participatory mapping of biodiversity with indigenous peoples and local communities, community-level monitoring of biodiversity).

Potentially, where networks able to respond rapidly are in place, some of this research may take place within the contexts and time frames of an IPBES assessment, and a knowledge gap highlighted early in an assessment can lead to information being produced in time for inclusion in an assessment's later drafts.

More often, such research will take place over the longer term, with the recommendations made in a final assessment influencing future research.

As also discussed above, within the context of an IPBES assessment, authors do not conduct new research. Long-term, in-depth research in the communities of indigenous or local peoples could however be recommended and encouraged by the recommendations and findings of an IPBES assessment and could start to generate the types of knowledge and monitoring that would be useful for future assessments, and which would be of benefit to indigenous peoples and local communities themselves.

References

Amano T, González-Varo JP, Sutherland WJ. 2016. *Languages are still a major barrier to global science*. PLoS Biol 14(12). DOI 10.1371/journal.pbio.2000933.

Anaya, J. 2012. *Report of the Special Rapporteur on the rights of indigenous peoples*. Human Rights Council, Twenty-first session, A-HRC-21-47.

https://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session21/A-HRC-21-47_en.pdf.

Conference of the Parties to the Convention on Biological Diversity, decision 13/18, Annex: *Mo'otz Kuxtal Voluntary Guidelines*.

Hill R. 2016. *Literature review of indigenous and local knowledge Sources: Chapter 5: Biocultural diversity, pollinators and their socio-cultural values*. Presentation for the Fourth Meeting of the IPBES Taskforce on Indigenous and Local Knowledge Systems, Chiang Mai, Thailand, 21 June 2016.

Löfmarck E, Lidskog R. 2017. *Bumping against the boundary: IPBES and the knowledge divide*. *Environmental Science and Policy*. 69: 22-28. DOI 10.1016/j.envsci.2016.12.008.

McElwee P, Ngo H, Fernández-Llamazares A, Reyes-García V, Molnár Z, Gueze M, Brondizio E and Díaz S. In press. *Including Indigenous and Local Knowledge in the Work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES): Outcomes and Lessons for the Future*. A contribution to The Routledge Handbook of Indigenous Environmental Knowledge.

Tengö M, Brondizio E. S., Malmer P, Elmqvist T and Spierenburg M. 2014. *A Multiple Evidence Base approach to connecting diverse knowledge systems for ecosystem governance*. *Ambio*. 43: 579. DOI 10.1007/s13280-014-0501-3.

Tengö M, Hill R, Malmer P, Raymond C M, Spierenburg M, Danielsen F, Elmqvist T and Folke C. 2017. *Weaving knowledge systems in IPBES, Convention on Biological Diversity, and beyond – lessons learned for sustainability*. *Current Opinion in Environmental Sustainability*. 26-27: 17-25. DOI 10.1016/j.cosust.2016.12.005

United Nations General Assembly, United Nations Declaration on the Rights of Indigenous Peoples: resolution / adopted by the General Assembly, 2 October 2007, A/RES/61/295, available at: <https://www.refworld.org/docid/471355a82.html>.

Appendix IV

Total proposed budget for IPBES for indigenous and local knowledge work in an assessment

Total proposed budget for IPBES for indigenous and local knowledge work in an assessment		
Year	Funded by IPBES	Funding to be sought from external sources
Year 0 – scoping		Scoping meeting to engage indigenous peoples and local communities in developing the scoping document for an assessment: \$40,000
Year 1 – planning and writing	Indigenous and local knowledge dialogue meeting to develop key questions related to indigenous and local knowledge: \$40,000) Side events at other meetings: \$10,000 Total: \$50,000	Funding for other meetings or events as required
Year 2 – First order draft	Indigenous and local knowledge dialogue meeting to review the first draft of the assessment chapters: \$40,000 Side events at other meetings: \$10,000 Total: \$50,000	Funding for other meetings or events as required
Year 3 – Second order draft	Indigenous and local knowledge dialogue meeting to review the second draft of the chapters and the first draft of the summary for policymakers of the assessment: \$40,000 Side events at other meetings: \$10,000 Total: \$50,000	Funding for other meetings or events as required
Year 4 – post assessment		Indigenous peoples and local communities outreach methods meeting Funding for other meetings or events as required Total: \$40,000
All years 0 – 4	\$150,000	\$80,000