Guidance for conducting the cross-chapter literature review on indigenous peoples and local communities and invasive alien species in the IPBES assessment of invasive alien species

This guidance document summarizes the objectives, framework, timeline and methodology for the cross-chapter literature review on indigenous peoples and local communities and invasive alien species in the IPBES assessment of invasive alien species. For more information, please listen to the recording of the training session held on 12 April 2021, here on Teams.

Please contact the TSU if you have any questions (ipbes-tsu-ias@iges.or.jp)

Contents

1.	. Obj	ectives of the literature review	2
		erall framework and methodology (including timeline)	
		p by step methodology for Data Extraction	
		Which paper(s) do I review?	
	3.2.	Record data in the Word template	3
	3.3.	Summarize the data in the Excel database	3
	3.4.	Important considerations	4
	3.5.	Uploading data to Teams	4
4.	. Anr	nexes	6
	Anne	x 1: Conceptual framework for the literature review	6
	Anne	x 2: Location of the Zotero folder	8

1. Objectives of the literature review

In order to respond to the IPBES mandate on indigenous and local knowledge (ILK), ¹ and to the scoping document² for the assessment of invasive alien species (IAS), the expert group will conduct a cross-chapter literature review on the relationships between invasive alien species (IAS) and indigenous peoples and local communities (IPLC).

This literature review will be conducted by the ILK liaison group and volunteers (including a limited number of Contributing Authors), who will collaborate across chapters in reviewing the selected literature.

The objective is to complete the literature review and integrate its results in the chapters and Summary for Policy Makers by August 2021.

2. Overall framework and methodology (including timeline)

Development of a framework

- The framework contains the variables and causal relations of interest. It guides the literature review.
- See Annex 1 and listen to the recording of the ILK training session, as well as the recording of the discussion on definitions, for more information
- Completed

Selection of

- This included the specification of selection criteria for literature case studies and reviews; a search for literature case studies and supporting material; and documentation of the search and selection process and outcomes
- Completed

Data extraction
(2 steps)

- Extraction of qualitative and other information from the selected literature in Word using a Template that contains all of the main variables and documents the extracted information;
- Summary and insertion of main findings in an Excel database developed for this purpose that will be used for analysis and case study development across the different chapters of the assessment.
- From the end of April to mid-June

Analysis

- Coding into frequencies and analysis of coded data to develop figures and tables as required; analytical qualitative summaries presented as global findings or case studies (e.g. on specific species, topics, or IPLC case clusters).
- From mid-June to early July

Integration in the chapters and SPM & more

- Incorporation of the findings throughout the text or in boxes (case studies), in the executive summaries, and in the Summary for Policy Makers (SPM)
- Possibility of co-authoring a post-assessment publication.
- From early July to mid-August

¹ https://www.ipbes.net/indigenous-local-knowledge

² https://ipbes.net/sites/default/files/ipbes-6-inf-10 en.pdf

3. Step by step methodology for Data Extraction

All reviewers, including IPBES Authors and Contributing Authors, will perform the data extraction as described below. The data extraction will be done using two templates:

- The Word template for literature data collection can be found here. An example, including detailed instructions and a sample case study can be found here;
- The Excel database for literature review, found here (where data extracted in the Word template will be summarised).

The Excel database contains a sheet with all of the definitions that are used throughout the Word Template and the Excel database. It is important that you use these definitions when you classify the data that you enter into the Word Template and the Excel database. A video has also been provided that takes reviewers through each of the definitions, which can be found <a href="https://exceleration.org/learning-new-months.com/learning-

3.1. Which paper(s) do I review?

- Each reviewer (with the exception of the CAs) will review a maximum of 15 publications.
- The **list of publications** is available in the Indigenous Citations assignments database (Excel) <u>here</u> on Teams.
- The TSU has **pre-allocated papers to each chapter** (column C) based on their topic, for guidance. Note that you may trade papers with other chapters, as this pre-allocation is flexible.
- Please **register your name** in Column A for each paper that you would like to review (consult the pre-allocation of chapters in column C for guidance).
- If you'd like to **add a paper for review**, please submit it for approval beforehand to ensure that these meet the selection criteria (ipbes-tsu-ias@iges.or.jp).
- If you wish to **reject a paper that has been assigned for review**, please submit this for approval beforehand, stating the reason for rejection (<u>ipbes-tsu-ias@iges.or.jp</u>) to ensure that this meets the rejection criteria.

All of the papers are available in Zotero, here (see Annex 2 for a screenshot of the folder location).

3.2. Record data in the Word template

Please **follow the instructions** laid out in the "Word template example including Instructions," found here.

Use the Word template (without instructions) (found here) to extract and record the relevant data from each case study. There will be ONE word template per study.

3.3. Summarize the data in the Excel database

Each reviewer will have ONE Excel database for literature review (with some exceptions – see below - each case study is entered as a **single row**).

- After completing the Word template, the findings recorded will be succinctly and briefly **summarised** and entered into the appropriate columns of the Excel database (please see examples provided in the spreadsheet).
- Some columns allow you to enter free text, while others contain drop-down menus (single or multiple choices are possible).

- All of the **definitions** (column headings and drop-down menus) are available on the second tab "Definitions". You can also access these by clicking on the column headings (cells have been linked).
- In case there are no data to complete a column, indicate **"no data"**. None of the columns will be left blank at the end of the review process.

3.4. Important considerations

Citing text: It is **very** important that you place any text that you have copied *verbatim* from the document in quotation marks and add the reference from Zotero including the page number.

Distinguishing IPLC knowledge/perspectives from those of the authors (scientists, governments, etc.): Just as is the case with the instructions found in the Word template, the information entered into the Excel database that is taken directly from IPLC themselves, e.g. as quotations from IPLC informants, or where the author states that the information was sourced directly from IPLC informants, will be colour coded in RED.

Treating documents with multiple cases, multiple social groups, multiple invasives, or multiple case studies on the same IPLC/invasive: normally, a single publication will deal with a single IPLC group and a single invasive, and will be entered into the Word template and the Excel database as a single row:

- **Multiple invasive species, one IPLC**: If a single publication systematically deals with more than one invasive species, and the findings for each of the invasive species differ significantly, then the information relating with each of the different invasive species should be presented in each column where these differences are significant.
- **Multiple social groups within a single IPLC community**: If a single publication reports on intracommunity variation within an IPLC (e.g. between large and small farmers, women and men, farmers and herders, etc.), these differences should be recorded under each appropriate column heading.
- Non-IPLC groups and IPLC groups in a single publication: If a single publication systematically deals with IPLC and Non-IPLC groups, presenting data and perspectives for each of these, then the focus of the review should be on the IPLC groups. However, if the comparison between the IPLC and non-IPLC groups yields insights into IPLC relations with IAS and with non-IPLC groups, then the relevant information about the non-IPLC groups should be included.
- **Literature reviews:** If a single publication presents a literature review, the findings of the literature review will be treated as a single case study and entered into a single row.

However, there is one exception:

If a single publication systematically deals with more than one IPLC community, these will be treated as separate case studies in the Excel database. Data will be entered into a single Word template but, in the Excel database, information on these different IPLC communities will be entered into separate rows, using as many rows as required to cover each distinct community.

3.5. Uploading data to Teams

Once you have finished reviewing a case study, please upload your Word template here and name it as follows: "First author name Publication year_IAS_ILK_Literature review template" (i.e., Howard2019_IAS_ILK_Literature review template).

Please regularly upload/update your Excel database here, naming it as follows "Your name_IPLC_IAS_Literature review database" (i.e. Howard_IPLC_IAS_Literature review Database).

Once you are done reviewing one publication, please indicate this (column B) in the Indigenous Search Results Citations database (here). If, after reviewing the publication, you are able to update the information entered into this sheet (e.g. for region, taxa, relevance to each chapter in columns I-M), or the citation, please update this data, as it may be incorrect.

4. Annexes

Annex 1: Conceptual framework for the literature review

Patricia Howard and the liaison group developed a framework that contains the variables and causal relations of interest, which were derived from a previous meta-analysis of case studies on IAS and IPLC (Howard 2019), as well as the two IPBES ILK dialogue workshops (please see Figure 1 and the list of guiding questions on ILK).

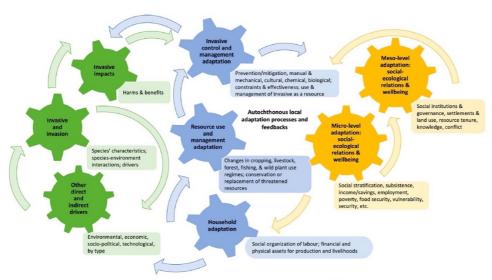


Fig. 1 Component 1. Human adaptation to invasive species conceptual framework. Drivers and spheres. Concepts emerged from the metasynthesis process. Green represents invasion and adaptation drivers, blue represents autochthonous adaptations to invasions, orange represents change in social relations and well-being that result from the invasion, other drivers, adaptation and feedbacks for human well-being. For categories and definitions, see Tables S4–S10

List of ILK questions developed for the first ILK dialogue workshop and used to guide the assessment:

Chapter 1: Conceptualization

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

Chapter 2: Trends

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

Chapter 3: Drivers

a) What are main causes and drivers of IAS in IPLC lands and waters?

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

Chapter 4: Impacts

- a) What are the impacts of IAS on IPLC communities, lands, waters?
- b) Are there some IAS which IPLCs consider to have greater social and ecological impacts than others? How do they measure this impact? For example, the size of the area impacted, more people talking about it, the degree of common knowledge about IAS, their impact on certain activities including livelihood (hunting, fishing, agriculture), their impact on cultural traditions (specific totems/dreaming/law), involvement with studies, two-way knowledge.
- c) When and under what conditions does the arrival of new IAS into the lives of IPLCs change their livelihoods and culture for the better or worse?
- d) How and under what conditions do IPLCs incorporate and culturally adopt versus reject new IAS into their communities, in the context of their values or livelihoods?
- e) Given all the other pressures on IPLCs (e.g. external population pressure, natural resource exploitation, climate change, etc.) and local ecology (e.g. land use changes, weather events, urbanization, etc.) are IPLCs able to identify the specific impacts of IAS on their community, or is it hard to discern between these and other impacts?
- f) Are IAS making some of these other pressures more challenging?

Chapter 5: Prevention, management and adaptation

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

Chapter 6: Future options and policy

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

Annex 2: Location of the Zotero folder

