

# Indigenous and Local Knowledge in National Ecosystem Assessments



## Case study based on the Colombian experience

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“It cannot be a single chapter, since we bear great responsibility for the fact that we inhabit territories of great diversity (...) A multicultural country must be honored.

**Danilo Villafañe, Indigenous People from the Arhuaco community of the Sierra Nevada de Santa Marta - Chapter 4 of the Colombian National Ecosystem Assessment.**

## Introduction

This case study is based on the conceptual and methodological framework of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ([IPBES](#)), which was the basis for the National Ecosystem Assessment of Colombia (2021). This conceptual framework establishes within its principles the recognition and respect for the contributions of Indigenous and local knowledge (ILK) relevant to the conservation and sustainable use of biodiversity and ecosystem services (UNEP, 2012).

From this approach, any national ecosystem assessment based on the IPBES methodology seeks to make visible the contribution of ILK to the understanding of biodiversity in a given territory. In this particular case, when we refer to ILK, we refer to the diversity of lifestyles and relationships that Indigenous Peoples and local communities (which in Colombia include blacks, Afro-descendants, palenqueros, raizales and Rrom) (INAPRRCL)<sup>1</sup> develop with nature with which they coexist” (López, et al., 2021).

From the above, it is easy to deduce that Colombia is a country in which this approach has a particular relevance and complexity. Colombia is an ethnically and culturally diverse country and this diversity is recognized in the Political Constitution in its first articles (Political Constitution of Colombia, 1991), making it clear that diversity and multiculturalism are key elements of the Colombian nation.

In Colombia, as could be expected in most megadiverse countries, there is an important particularity that motivates a special dedication to include ILK in any biodiversity valuation and assessment exercise. This particularity refers to the fact that in the areas of greatest biological diversity there is also an important cultural diversity. Therefore, the Colombian experience resulted in a change in the name of the chapter and its focus, which initially only talked about the inclusion of ILK. The chapter was renamed “Biocultural diversity: knowledge and practices for the care of life in the territories of Indigenous Peoples and local communities” and sought to integrate the undeniable relationship between biodiversity and cultural dynamics in Colombia, which, for Indigenous Peoples, Afro-descendant, Palenqueros, Raizales, and Rrom communities, is part of an obvious integrality.

It was also aimed to ensure the participation of the holders and/or experts of ILK as authors of the assessment, trying to harmonize the vision of traditional western research with other ways of understanding Colombian biodiversity.

<sup>1</sup> The national ecosystem assessment of Colombia uses the expression of Indigenous, Afro-descendants, Palenqueros, Raizales, Rom and local communities, adopted in the “Pluricultural National Policy Proposal for the Protection of Traditional Knowledge Systems Associated to Biodiversity” (Project Col 7446 GEF UNDP MADS) as it specifies the groups that are considered as local communities in the country.

As a result of this alignment, the structure of the chapter was the first of its kind, as this was the first national ecosystem assessment to have an exclusive section for the inclusion of the biocultural dimension. The construction of the chapter had 6 sections that shaped it, having a **first section** where the conceptual framework was developed and the definition of biocultural diversity and the key concepts to understand it were given.

The **second section** is entitled "Indigenous Peoples and local communities in the national context" and provides a look at the way in which the Colombian government recognizes ILK and Indigenous Peoples and local communities, also showing how the geographical distribution of these human groups coincides with the conservation of biodiversity in the country.

The **third section** discusses the interest of academia, NGOs and other institutions in ILK, making an extensive review of the academic literature on Indigenous and local knowledge, while pointing out the existing gaps. At the same time, an approach is made to different organizations and initiatives, both public and private, around ILK.

The **fourth section** is quite special, since it is called "Other ways of knowing other worlds" and focuses on explaining the justification for incorporating other knowledge systems in the assessment. It points out that this interest arises from recognizing that reality is composed of multiple "realities" that have been excluded from the Eurocentric-Western experience. Therefore, this section explains the need to understand and include ways of understanding the world that allow the plurality of knowledge and ways of knowing.

Within the chapter there is a phrase pronounced by Danilo Villafañe – Indigenous People from the Arhuaco community, which sums up quite well the essence of this section and the cross-cutting nature of the biocultural diversity of the Colombian national ecosystem assessment: *"It's about talking of the relevance of this kind of knowledge as we have not invented it recently. Rather, the environmental issue in the Western world is a new topic. But we come with old processes and therefore it is worth paying attention to us."*<sup>2</sup>

The **fifth section** presents the main threats to biocultural diversity, listing direct and indirect threats, as well as a detailed explanation of why nature could be considered as a victim. Finally, this section reflects on the cycle of violence and its relationship with threats to land and Indigenous Peoples and local communities.

The **sixth section** presents concrete experiences of resistance and alternative ways to protect territories and livelihoods. This section looks at different types of territorial resistance, social mobilization and socio-environmental tensions, as well as transformative practices. The chapter included an annex with several cases presenting the name of the case and a brief description and the source from which the information was obtained.

Name	Description	Sources
<b>Indigenous People and Local Communities</b>		
Sutsuin Jijeyu Wayuu – Fuerza de Mujeres Wayuu (Wayuu Women Force)	<p>Process promoted by an Indigenous women’s organization in the municipalities of Albania, Barrancas and Hatonuevo in the Guajira Peninsula “Fuerza de Mujeres Wayuu, is a defender of the Womainkat - Mother Earth, water, rights as Indigenous people and in particular the rights of women in the territory with weak governance, interests in mining and hydrocarbon exploitation, corruption and violation of human rights...”. They work to make visible the situation of violation of human and Indigenous rights of the Wayuu people, related to their condition as victims of the internal armed conflict (paramilitarism, militarization of the territory, guerrilla), the impact of mining and energy megaprojects in their territory, forced displacement and mainly the situation of violation of the rights of Indigenous women. It promotes different actions such as herding projects and alternatives to soil contamination, deforestation and groundwater depletion, organizational strengthening, defense of the land and the environment, cultural self-determination and the expansion of mechanisms for citizen participation. They were recognized with the National Award for the Defense of Human Rights in 2017 and have been subject to constant threats and persecution.</p>	<p>Universidad de Antioquia, 2019. Sutsuin Jijeyu Wayuu – Fuerza de Mujeres Wayuu</p> <p><a href="https://www.elheraldo.co/la-guajira/fuerza-de-mujeres-wayuu-gana-premio-nacional-la-defensa-de-los-derechos-humanos-404117">https://www.elheraldo.co/la-guajira/fuerza-de-mujeres-wayuu-gana-premio-nacional-la-defensa-de-los-derechos-humanos-404117</a></p> <p>ONIC (mayo 2019) <a href="https://www.onic.org.co/comunicados-regionales/2986-fuerza-de-mujeres-wayuu-y-varios-de-sus-integrantes-reciben-amenazas-directas-por-parte-de-un-panfleto-publicado-por-las-aguilas-negras">https://www.onic.org.co/comunicados-regionales/2986-fuerza-de-mujeres-wayuu-y-varios-de-sus-integrantes-reciben-amenazas-directas-por-parte-de-un-panfleto-publicado-por-las-aguilas-negras</a></p>

Figure 1. Example of resistance cases in the annexes of Chapter 4

The chapter on “Biocultural diversity: knowledge and practices for the care of life in the territories of Indigenous Peoples and local communities” implied the use of a series of strategies focused on establishing bonds of trust with the holders and/or experts of ILK to facilitate the dialogue between the authors and ensure that this dialogue and trust was present in the chapter and throughout the assessment.

Of course, it was a complex task that left lessons learned and revealed obstacles inherent to these processes, which are shared in this case study so other countries starting their national ecosystem assessments take them as a reference.

## Development of a specific chapter on ILK and considerations for the inclusion of Indigenous and local knowledge within the national ecosystem assessment

Attention is drawn to the definition used by IPBES of Indigenous and local knowledge systems. This definition mentions that these knowledge systems are dynamic and involve practices and beliefs that confirms that the relationship of living beings, including human beings, has a social, ecological and cultural integration with the environment and that biological and cultural factors are equally part of the ecosystem, generating a holistic vision of biodiversity. The union of the biological and cultural diversity gives way to a concept known as “biocultural”.

There is currently no established methodology for addressing the livelihoods and knowledge systems of Indigenous Peoples and local communities within the process of developing national-level assessments. However, experiences such as the 2019 IPBES Global Assessment on Biodiversity and Ecosystem Services and the national ecosystem assessment of Colombia demonstrate that such an approach requires an exercise to measure the time needed for the participation of Indigenous Peoples and local communities.

Why is a point-in-time measurement required for this? The inclusion of other visions in the assessment, different from traditional western approaches, has two important challenges: 1) How to define the key policy questions and how to harmonize the answers arising from the vision of Indigenous Peoples and local communities; 2) How to ensure that the call for authors of the assessment reaches places far from urban places, including places with complex geographical accessibility, and is attractive to Indigenous and local knowledge holders.

These challenges imply an additional exercise that must be considered from the beginning to achieve effectiveness in the inclusion of ILK, also taking into account the need to mobilize funding to support the participation of Indigenous Peoples and local communities, which in the Colombian case was voluntary, and to ensure that Indigenous and local knowledge holders contribute with their diverse worldviews (McElwee et al., 2020 in IUCN, 2022).

In this sense, the experience of the Colombian national ecosystem assessment ratifies the lessons learned from the IPBES Global Assessment on Biodiversity and Ecosystem Services, given that the first step in preparing the chapter was to agree on the **approach** with representatives of the different Indigenous Peoples and local communities involving representatives of Indigenous Peoples and local communities recognized by their communities and holders of ILK.

This consultation resulted in the **agreement of the chapter’s approach** based on understanding how the country’s cultural diversity is interrelated in multiple ways with the diversity of the territories and their biodiversity, through knowledge systems and practices that are relevant for their conservation and sustainable use. It should be clarified that this was not a guiding question as in the other chapters, but it was the basis for defining the approach to understand where the process of building the chapter started from.

From the approach of understanding how cultural diversity interrelates with biological diversity, **three fundamental principles** were derived to advance in the development of the chapter and define its content:

1. Indigenous and local knowledge cannot be understood independently of the practices and territories in which they have been configured, so it is important not to underestimate the link between communities and the territory. The relationship between the biological and cultural vision of the territory should be the essence of the chapter and ignoring or underestimating it poses a threat to the correct inclusion of ILK in the national ecosystem assessment.
2. The spiritual dimension and reciprocal links of Indigenous Peoples and local communities with the territory that are an integral part of their knowledge must be considered. The spiritual dimension to be included in the chapter must have the approval of the Indigenous and local knowledge experts/authors.
3. The people who holds this knowledge contribute in a key way to the care of nature, so they should be central actors and be part of the group of authors of the assessment, since it is expected that the results of the assessment will contribute to the definition of public policies for research and governance of the territory (López, et al., 2021).

With the approach defined, the second step was **the call for authors**. Wise men and women (sabedores) from Indigenous Peoples and local communities were invited to participate as authors, contributing on a voluntary basis. This call for authors was open for one year, so that those interested could join the process (Chindoy et al., 2019). However, this will be emphasized in the lessons learned, because although the call was open for a year, this did not necessarily imply having Indigenous and local knowledge experts involved in the assessment from the beginning.

The third step was **to hold a workshop** with the selected authors during the first semester of the national assessment in the city of Bogota, Colombia's capital and with a geographically central location.

This workshop involved the participation of representatives of different Indigenous Peoples and local communities. Its objective was to identify the best way to include the ILK. An international expert facilitated the workshop, using the Dialogue methodology. The agreements and visions of the workshop were the basis for drafting the contents and key messages of the chapter (Chindoy et al., 2019).

## Lessons Learned

Based on the Colombian experience, the following are lessons learned to include ILK into national ecosystem assessments:

- **The importance of biocultural aspects:** Territories with greater biodiversity are generally those with greater cultural diversity, so the inclusion of this knowledge is vital for understanding the biodiversity-culture relationship and for decision-making and policy formulation in this regard.

- **Preparation is key:** Any assessment that intends to include ILK should spend a prudent amount of time to find the best way to approach those traditional knowledge systems, ask the right questions and ensure the interest of Indigenous Peoples and local communities, which may exceed the normal timeframe needed against assessments that do not include this approach.
- **Recognizing and including other ways of knowledge:** Participation of Indigenous Peoples and local communities as experts of national ecosystems assessment is complex and implies considering ways of incorporating ILK, which is orally transmitted. In Colombia, many of the Indigenous and local knowledge holders who participated as experts at the beginning of the process abandoned it before the assessment finished, as they were unable or unwilling to adapt to the western methodology used to develop the assessment. Some ended up only as contributing authors while others distanced themselves completely from the process.
- **Arranging encounters and learning opportunities:** Workshops can be held to ensure the implementation of the IPBES methodology when also including ILK. In Colombia, to address disinterest, incompatibility and desertion, the workshop had an important impact on the inclusion of ILK and the participation of knowledge holders and experts that continued until the end of the assessment. These spaces for consultation and participation, should be considered necessary to achieve the correct inclusion of Indigenous and local knowledge systems.
- **Finding the right place to meet:** Choosing the place for the meetings is not a trivial matter, but needs to be thought out strategically, especially in countries with complex geographies. When developing the national ecosystem assessment of Colombia, it was initially thought that holding the workshop in Bogota, the capital, could mean deepening the centralization of the process, as usually important meetings happen in the capital and regions are left aside. However, in this particular case given the remoteness places where Indigenous Peoples and local communities live and the difficult access to them, the most practical and economically viable option was to mobilize the knowledge holders to a central location that was, in relative terms, easier to reach from anywhere in the country.
- **Calling for experts:** It is important to make additional efforts in terms of the dissemination of the call for experts to reach the most Indigenous Peoples and local communities in the country. In Colombia, an extensive call would have been required to reach more regions of the country, reaching local leaders and communicating the importance of their involvement in the development of the national ecosystem assessment. One element to consider is that most of the Indigenous Peoples and local communities that participated had a background and proximity to the academia and western methodologies. However, it would have been possible to have a greater participation of Indigenous and local knowledge holders coming directly from the communities, but the geographical complexities added to the complexity of informing the importance of the assessment and the fact that the authors participated ad-honorem in the process.

Additionally, it is important to have a flexible and open call (throughout the duration of the assessment) to include Indigenous Peoples and local communities who have heard late about the assessment process and like to participate. In Colombia, once the call was closed, direct invitations were sent to some Indigenous peoples and local communities to increase



their participation (although in the case of the latter two, their presence was minimal).

- **The methodology used to identify the chapter's approach:** Regarding the chapter's approach, the support of an expert addressing the workshop under the Trialogue methodology was necessary and useful. This is not a minor issue, as it is more the rule than the exception to find a lot of disagreement when bringing together Indigenous Peoples and local communities, practitioners and decision-makers to address difficult questions as for example how ILK is going to be included in a national ecosystem assessment. Additionally, some Indigenous Peoples and local communities involved might not always speak for the entire community or group they represented. These discrepancies, if not addressed with a flexible and comprehensive methodology, can lead to endless discussions that generate an important logistical disorder that ends up affecting the development of the assessment and its credibility and legitimacy.
- **Access to work tools is essential:** The asymmetry of work tools between researchers in traditional academia and Indigenous Peoples and local communities should not be underestimated as they often do not have access to a workstation, a computer or permanent internet access, which generates an important difference in terms of their capacity to contribute, causing them to fall behind in many cases according to the assessment schedule and end up getting frustrated and losing interest in continuing to contribute in the assessment process. For example, in Colombia this meant that some of the Indigenous Peoples and local communities participating in the assessment as authors that had easier access to these tools ended up overloaded with work because their colleagues did not have the same possibilities. In this sense, a different time horizon should be defined for Indigenous Peoples and local communities, or they should be given access to these tools from the beginning. Additionally, the possibility that Indigenous and local knowledge can be transmitted orally, through recordings or other tools that facilitate the participation of Indigenous Peoples and local communities should be considered.
- **The Trialogue is a methodology that works:** The [Trialogues methodology](#) is based on the recognition of the need for cooperation to address complex problems. Thus, the Trialogue promote the articulation between science-policy-practice for the sustainable use of biodiversity and ecosystem services, including the participation of members of NGOs, community organizations, the private sector, and groups of Indigenous Peoples and local communities. In the Colombian case, at the end of the expert evaluation process, a Trialogue was convened to include the views of Indigenous Peoples and Local Communities on the findings and their implementation, which was a good opportunity for these views to be discussed in the same scenario with the other stakeholders. This exercise addressed 4 main objectives: a) Raising awareness of the relevance of the overall findings of the national ecosystem assessment; b) Sharing knowledge in policy, science and practical experience among communities on the main findings; c) Identifying regionally and nationally relevant risks and opportunities for biodiversity and nature's contributions to people and; d) Generate a commitment to collaborate to protect biodiversity and its contributions to people, adopting the recommendations of the national ecosystem assessment according to the competencies of the participating organizations and the different realities and contexts at the regional level. As a lesson learned, it can be stated that it is necessary to give equal importance to the post-Trialogue scenario, since the interest and actions of the participants must be maintained in the implementation of the action plans resulting from the Trialogues, ensuring that the

dialogue does not remain only in the agreements reached by the different parties, but that it can have concrete results.

**The consultation meetings should take time, but should not last as long as the assessment:**

It is important that the consultation meetings (workshops) has a maximum duration of 2 or 3 days to accommodate all visions, but without turning it into an overly extensive exercise, and always seeking that its outcome generates thematic roundtables aligned with the content of the assessment. Finally, from the Colombian experience, the success of the implementation of this methodology was reflected in its tangible result: the definition of the actions to be implemented with their respective responsible parties at the national, regional, and local levels, collaborating organizations for each action and a work schedule, considering the timeframe established by the different actors involved.

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