

# Five-dimensional sustainability assessment

A tool for assessing if wild species use is sustainable, legal and safe



Part of



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## Introduction

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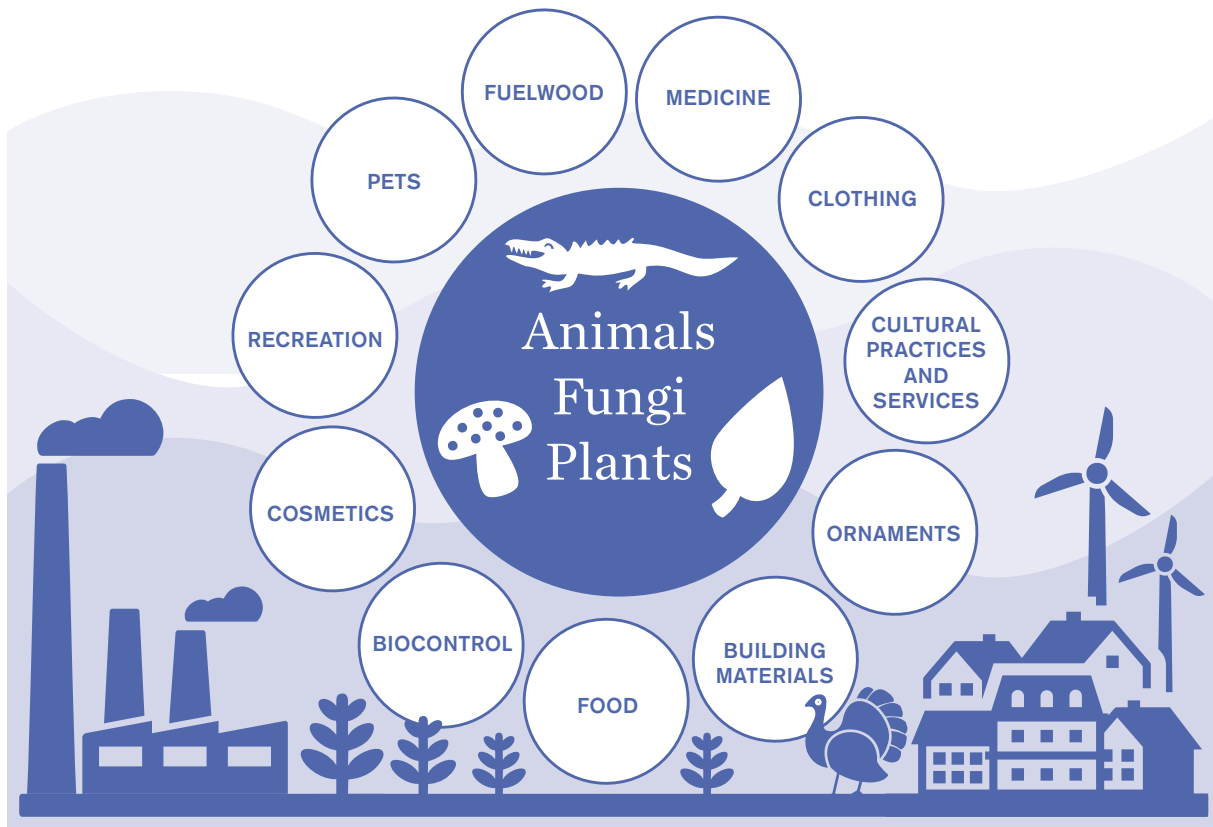
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# 1. Introduction

Billions of people across the world use wild species — for food, medicine, recreation and income, as well as a wealth of other purposes (see Figure 1). It is estimated that between 3.5 and 5.8 billion people (between 40% and 70% of the world's population) use thousands of wild plant, animal and fungus species and products in raw or processed forms.<sup>1</sup>

The scale of the use varies by species and geography, from subsistence use by individual households to meet day-to-day needs, to large-scale industrial use for commercial purposes. It is central to the identity and culture of many Indigenous Peoples and local communities,<sup>2</sup> and may also be central to the local and national economies of many countries.

Unsustainable, over-exploitation of wild species is, however, one of the key drivers of biodiversity loss.<sup>3</sup> It is therefore critical that use of wild species is sustainable. Indeed, sustainable use of biological resources — including wild species — is one of three pillars of the UN Convention on Biological Diversity (CBD), alongside conservation and equitable benefit sharing. The CBD definition of sustainable use emphasises ecological sustainability and persistence of the biodiversity resource.

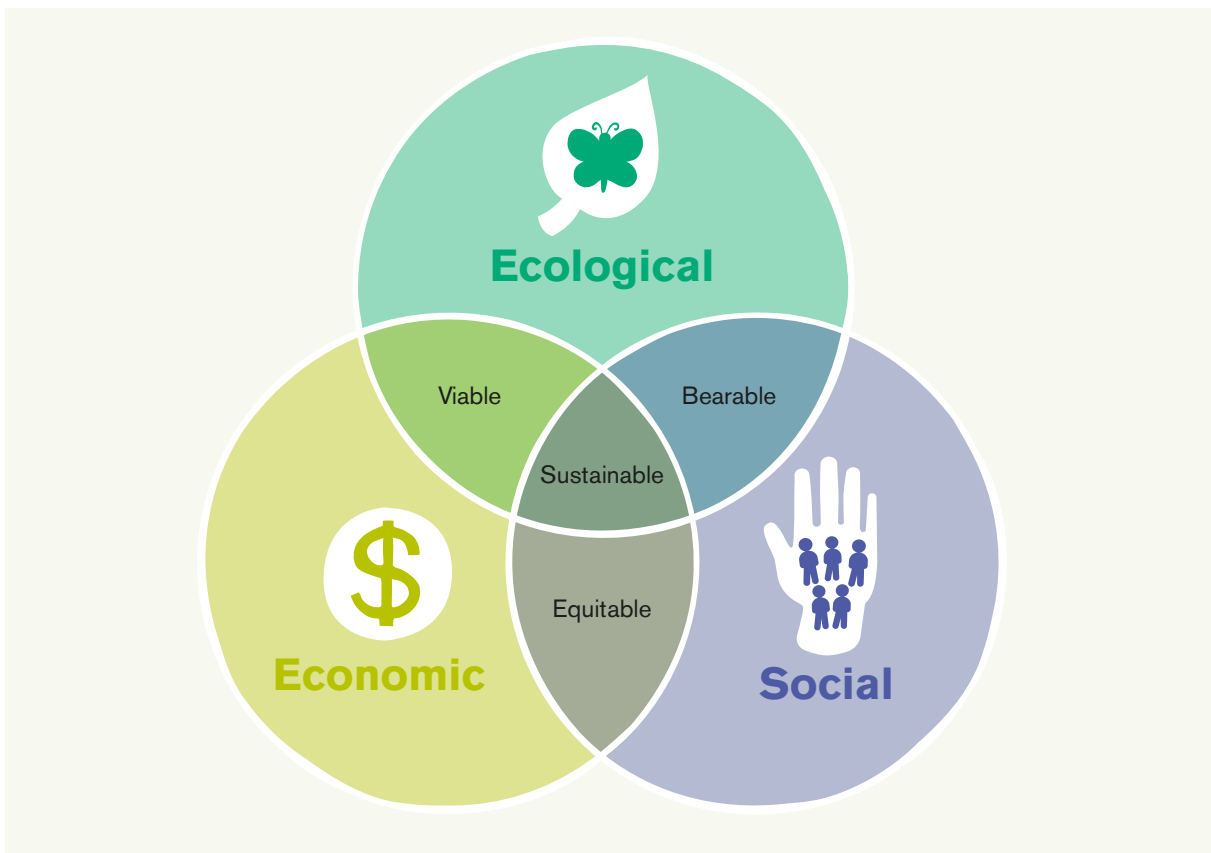


**Figure 1.** Animals, fungi and plants are used for a myriad of different purposes. Image adapted from IUCN SULi

Sustainability is commonly described with three dimensions: ecological, social and economic. These three dimensions are often depicted as three nested or overlapping circles, or three pillars<sup>4</sup> (see Figure 2).

For some, this three-dimensional view of sustainability is not enough. Animal welfare advocates have long raised concerns about the treatment of wild animals in some forms of species use. In particular, those that entail the killing of sentient animals or periods of captivity, handling, transport and other ‘unnatural’ interactions with humans.

Most countries have some legislation that relates to animal cruelty, but in general the protection afforded to wild animals falls way behind that for domestic and farmed animals.<sup>5</sup>



**Figure 2.** ‘3D’ sustainability

### **?** Box 1. What is sustainable use?

**“The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.”**

Definition of sustainable use according to the United Nations Convention on Biological Diversity, Rio de Janeiro, 1992.

In addition to animal welfare concerns, the COVID-19 outbreak led to a focus on the human health impacts of some wild animal uses, an issue that is also connected to animal health and welfare, and reflected in the World Health Organization's concept of 'One Health'.<sup>6</sup>

Concerns about the safety of wild species use is reflected in the Kunming-Montreal Global Biodiversity Framework (GBF) that was adopted by Parties to the CBD in 2022. Target 5 of the GBF states that harvest, use and trade of wild species should not only be legal and sustainable, but also 'safe' (see Figure 3).

However, there is no straightforward way to determine if use, harvesting and trade is sustainable, safe and legal. Sustainability science is complex and technically challenging; safety in the form of zoonotic disease risk is equally difficult to assess, and even legality — which might appear straightforward — is often contested, particularly when customary law and formal law are in conflict.

Nevertheless, those working in sustainability need an approach that cuts through the complexity, is accessible to conservation practitioners and policymakers, and aligns with the GBF.

Cognisant of these challenges, a group of like-minded organisations — supported by a multidisciplinary expert committee<sup>7</sup> — collaborated to develop a novel five-dimensional framework for exploring wild species use. This toolkit provides details about the framework and how to apply it.



The graphic features a circular icon with a blue border and a white center containing a blue circular arrow. To its right is a circular logo composed of colorful, irregular shapes in shades of green, yellow, orange, and blue. The text 'Kunming - Montreal' is positioned above the main title 'GLOBAL BIODIVERSITY FRAMEWORK' in a large, bold, black font. Below the title, the text 'GBF HOME // TARGET 5' is displayed in a smaller, blue font. The main heading 'Target 5' is in a large, bold, green font, followed by the sub-heading 'Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species' in a bold, green font. To the right of this text is a small, irregular, orange-yellow shape. At the bottom, a paragraph of text in a smaller, italicized, grey font describes the target's goals: 'Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.'

Kunming - Montreal  
**GLOBAL BIODIVERSITY FRAMEWORK**

GBF HOME // TARGET 5

## Target 5

### Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species

*Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.*

**Figure 3.** Target 5 of the Global Biodiversity Framework

A close-up photograph of a buffalo's head, showing its large, dark, textured horns and its dark, wet-looking nose. The buffalo is looking directly at the camera. The background is a soft-focus green field.

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# 2. What is the 5D Sustainability Assessment Toolkit?

## Contents of the toolkit

**The 5D Sustainability Assessment Toolkit consists of three key elements:**

- 1. A framework of principles** for each of the conventional three dimensions of sustainability (ecological, social and economic) with two additional dimensions (animal health and welfare, and human health), as well as a number of cross-cutting principles that apply to all dimensions.
- 2. A scoring tool** for assessing a particular wild species use initiative (for example, a game ranch, a hunting operation, a plant harvesting enterprise) and identifying areas for improvement.
- 3. Step-by-step guidance** on how to use the scoring tool to assess the performance of a wild species use initiative against the framework principles.








## The 5D framework

The five-dimensional sustainability assessment framework (5DSAF) consists of 42 principles: seven for each of the five dimensions and a further seven cross-cutting principles that are relevant to all of the dimensions (for example, compliance with relevant legislation). These 42 principles were derived from a review of existing global, sectoral or species-specific standards, principles and guidelines. These included (but were not limited to): the Addis Ababa Principles and Guidelines for Sustainable Use of Biodiversity;<sup>8</sup> CITES non-detriment findings;<sup>9</sup> BioTrade Principles and Criteria;<sup>10</sup> the FairWild Standard;<sup>11</sup> the Wildlife Friendly<sup>®</sup> Standard;<sup>12</sup> World Health Organization (WHO) guidance on reducing risk of pathogen transmission from animals to humans;<sup>13</sup> and World Organisation for Animal Health (WOAH) guidance on animal welfare.<sup>14</sup>

Some of these resources apply to only one dimension of sustainability (for example the CITES non-detriment findings apply to ecological dimension only, while the WOAH animal welfare standards apply to the animal health and welfare dimension only). Others apply to multiple dimensions (for example the FairWild standard includes principles relevant to both the ecological and social dimensions). The principles also reflect the findings and recommendations on effective sustainable use policy made by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in its thematic assessment report on the sustainable use of wild species.<sup>2</sup>

Table 1. Summary version of the five-dimensional sustainability assessment framework

*Ecological sustainability is the **most important** in terms of maintaining biodiversity.*

 <b>Animal welfare</b>	 <b>Human health</b>	 <b>Ecological</b>	 <b>Social</b>	 <b>Economic</b>
Access to food and water	Personal health, hygiene and biosecurity standards	System in place to govern scale and rate of use of target species	No harmful discrimination limiting involvement in species use	Business plan in place
Access to shelter, resting places and free movement	Biosecurity, hygiene and safety measures in animal handling facilities	Alignment with existing species conservation plans	Formal or customary access and use rights are respected	Appropriate enabling environment to ensure financial viability
Minimisation of pain stress and suffering in all procedures	Health and safety in activities involving wild species	No adverse effects on conservation status of the target species	Agreements with local communities based on free, prior and informed consent	Clear market for the product
Stocking densities that allow for normal behaviours	No sick, contaminated, decaying or toxic plants or animals enter human food chains	No adverse effects on other aspects of biodiversity/ environment	Visitor behaviour regulated on local communities' land	The specific type of use is more competitive than alternatives
No facilitation of disease or parasite transmission	Short and simple trade chains	No introduction or spread of invasive species or non-native species	Fair employment conditions and labour rights	The use contributes to local or national economy
Prompt treatment of health issues	Disease surveillance systems in place	Energy efficient, minimal waste and non-polluting practices employed	No undermining or displacement of local communities	Value chain understood and acceptable to those involved
Sufficient knowledge held by people working with animals	Appropriate training, equipment and work environment to ensure health and safety	No negative impact on areas/sites important for biodiversity	Contribution to the wellbeing of local communities	Sufficient revenue to invest in the maintenance of the resource
 <b>Cross-cutting principles</b> 				
Compliance with applicable local, regional, national and international law				
Application of relevant best practice guidance				
Monitoring and adaptive management				
Precautionary approach to risks				
Good governance				
Traceable supply chains				
Well-trained and knowledgeable personnel				

See [appendix 1](#) for a more detailed version of this table, also available to download at: [bit.ly/5d-assessment](https://bit.ly/5d-assessment)

For each principle there are **four indicators** that identify how closely the use of wild species is aligned with the principle. Each criterion is associated with a score from 0–3, indicating the following level of alignment with the principle:

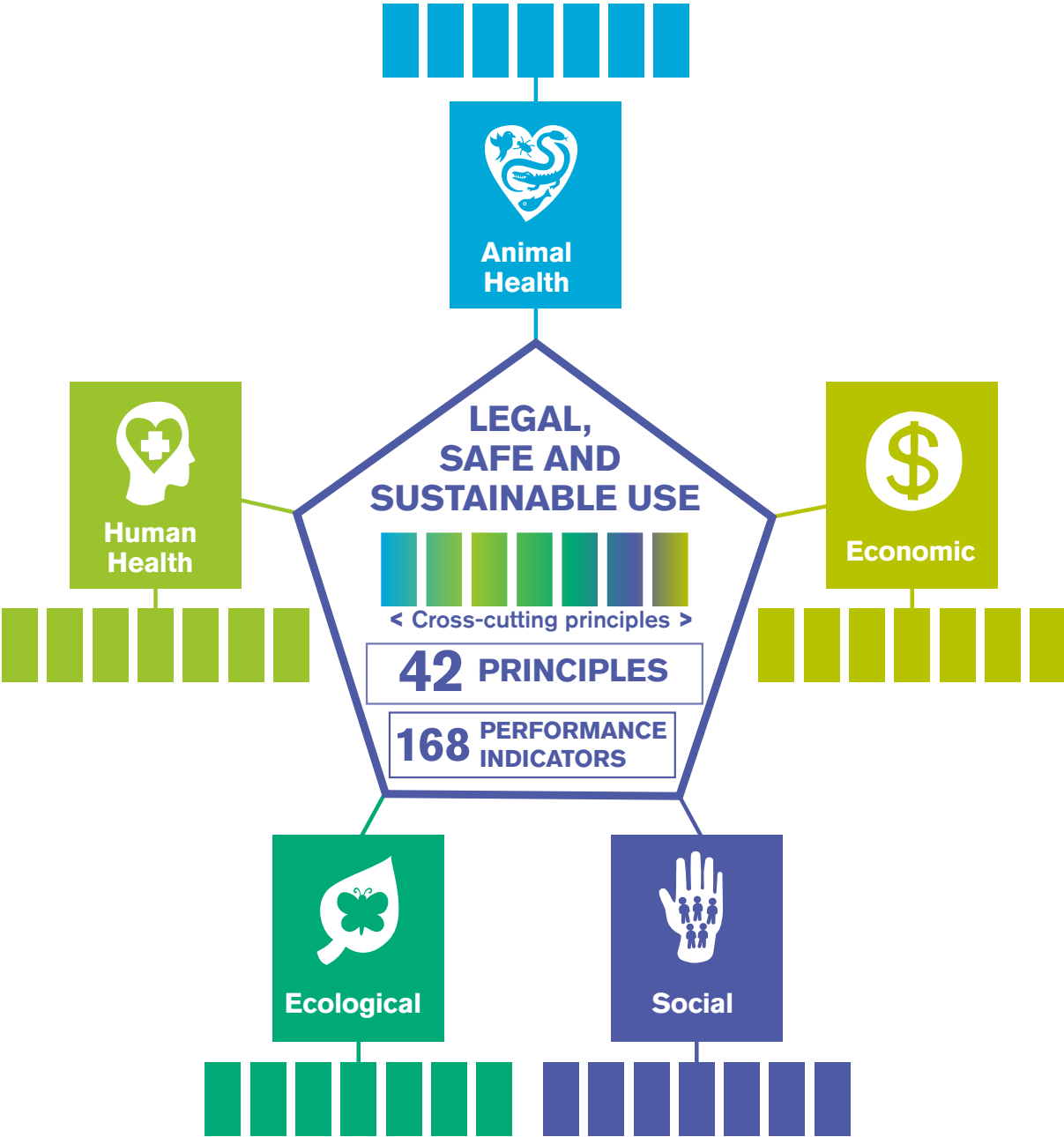
- 0** = no evidence of alignment with the principle (bad practice);
- 1** = evidence of some but insufficient alignment with the principle (emerging good practice);
- 2** = evidence for good overall alignment, albeit with some weaknesses (good practice);
- 3** = evidence that the provisions of the principle are met or even exceeded (best practice).

To illustrate this, Figure 4 provides examples of the indicators for a principle in the ecological sustainability dimension.

Principle	Indicators
The species use does not adversely affect the conservation or restoration of non-target elements of biodiversity (for example, non-target species, ecosystems, ecological processes, natural habitats, soil and water condition and quality)	<b>0:</b> the species use has demonstrated a negative ecological effect on non-target species or on the wider habitat with no plans for mitigation OR there is no information about presence of non-targeted elements of biodiversity that are likely to be affected by target species use
	<b>1:</b> the species use has some negative effects, these are recognised but mitigation plans are not yet in place or implemented
	<b>2:</b> the species use is not a threat to survival of non-target species or the wider ecosystem, but there may be some localised or timebound negative effects that are recognised and mitigation plans are underway (and can be mitigated with adaptive management)
	<b>3:</b> the species use has a documented positive or neutral effect on biodiversity, including non-target species, ecosystems, ecological processes and so on, and there is clear evidence of restorative/regenerative practices

**Figure 4.** The above principle has four indicators demonstrating a range of practice from bad to exemplary

# Graphic summarising the 5D Sustainability Assessment Framework



## The scoring tool

The scoring tool is available here: [bit.ly/5D-framework](https://bit.ly/5D-framework). It consists of three worksheets: an instructions sheet, an assessment sheet and a results sheet.

The tool guides the user through the framework, principle by principle. For each principle, it first asks if the principle is relevant to the wild species use under consideration (for example, the animal welfare principles will not be relevant to plant and fungi uses, and some may also not be relevant to situations where the use takes place in the wild rather than in captive conditions).

It then asks the user to assign a score of 0–3 to the relevant principles — based on the indicators provided — and to provide evidence to justify the score. Finally, it provides space to record actions that could be taken to improve performance against any low-scoring principles.

The tool sums the scores under each dimension of sustainability and presents the results in the form of a radar chart, which highlights which dimensions a particular wild species use may be performing well against, but also where there are weaknesses and opportunities for improvement.

**ASSESSMENT TOOL (PILOT VERSION)**

This Excel tool is intended to help you apply the 5-D Sustainability Assessment Framework (5DSAF). The first worksheet - "Assessment sheet" will take you through each of the 42 principles in the 5DSAF one by one starting with the animal welfare principles and ending with the cross cutting principles.

- 1) For each principle you must first decide if the principle is relevant to the species use under consideration. Not all principles are relevant for all uses - for example animal welfare principles are not relevant to species uses involving plants. Mark the relevant cell in column D yes (Y) or no (N) depending on whether or not the principle is relevant. If you decide the principle is not relevant please provide an explanation in column G (Rationale).
- 2) Then read the criteria underpinning the principle in Column E and, based on these criteria, allocate a score of between 0 (bad practice) and 3(exemplar practice) in Column F for the species use you are assessing.
- 3) Provide a short explanation in Column G as to why you chose this score.
- 4) Then provide details of evidence that can back up you score and your rationale in Column H (eg copies of business plans, copies of management plans, copies of FPIC processes etc).
- 5) Repeat this process for each principle
- 6) The tool will automatically sum up all the scores and work out how the species use has performed compared to a maximum possible score (taking into account that the number of relevant principles will vary from species use to species use). The results will be presented in the form of a radar chart displayed in the Results worksheet
- 7) Depending on how the assessment is done (eg a workshop or a one-person assessment) the results can be discussed or reflected on to explore why the use being assessed may be performing well against some principles but badly against others
- 8) Finally, for aspects of sustainability where the species use is not performing well, record in Column I of the Assessment sheet, some future actions that could be taken in order to enhance sustainability. This can be done on a principle by principle basis (recommended).
- 9) Save and date your assessment sheet and then use it as a baseline for a regular (we suggest annual) check in and process of continuous improvement.

Remember to save each new assessment with a new date so that you don't inadvertently overwrite old assessments

INSTRUCTIONS | Assessment sheet | Results

## Who should use the toolkit and how?

A range of different assessment approaches can be adopted using the toolkit, from a quick self-assessment to an external review and possibly, in the future, certification.

The 5DSAF was designed initially for self-assessment with individual wildlife use enterprises/initiatives/supply chains in mind (for example, a game ranch, a crocodile farm, a medicinal plant harvesting enterprise). Through the piloting phase, however, it has been applied to enterprises by individual researchers and/or subject experts. In some cases, these experts have used their own judgement to undertake the assessment, in other cases they have convened stakeholder workshops and undertaken the assessment in a collaborative way.

The toolkit lends itself to either use — the steps to follow for the assessment are the same in a workshop setting or in an individual self-assessment setting. However, additional steps will be required to organise and run a workshop if required.

The next section of this toolkit provides a step-by-step guide to conducting the assessment.

The guidance is aimed at the lead assessor, whether that is an enterprise manager using the tool as a checklist to inform management practices, or an external researcher/evaluator looking to conduct a more formal assessment, either through an individual expert review process or stakeholder workshops.

The guidance assumes a basic level of competence in facilitating workshops and meetings, and focuses specifically on the technical aspects of the tool. For some guidance on facilitating workshops, see Annex 1.



## Case study. Applying the 5DSAF in practice in South Africa



In South Africa, the 5DSAF was used to assess three wildlife ranches, two in the Eastern Cape and one in Limpopo Province. Each ranch had a different focus — from wildlife protection and ecotourism, to hunting and game meat production.

Each assessment was carried out by an external researcher (one member of the international consortium that developed the framework). In these cases, the researcher collected primary data from individual wildlife ranches, using a questionnaire asking fact-based questions about their properties and management approaches.

On-site meetings also enabled the researcher to make direct observations of the enterprise to validate questionnaire responses. The researcher then analysed the data from the questionnaires, the ranch management plans and from personal observations to assign scores to each of the 5D framework principles.

The results were then presented back to the ranch managers for discussion.

A close-up profile of a vicuña's head and neck, showing its thick, golden-brown woolly fur. The background is a blurred mountain landscape with snow-capped peaks under a cloudy sky.

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# 3. Step-by-step guide to conducting a five-dimensional sustainability assessment

## Step 1. Familiarise yourself with the framework

Before you start the assessment, it is important to remind yourself of the logic behind the framework and the issues the principles cover. Take time to familiarise yourself with the five dimensions and cross-cutting elements, the 42 principles and the indicators that underpin each principle.

If you are not the owner/manager of the enterprise/activity you are planning to assess, collect some basic background information first (management plans, supply chain studies and so on). Then think about which of the five dimensions of sustainability are applicable. For example, if you are assessing an initiative that is based on the use of plants, you will know that the animal welfare dimension is not relevant. For an initiative focused on the use of wild animals in their natural habitat, many of the welfare principles will not be relevant since they mainly apply to captive or enclosed animals, but others may still be relevant.

Familiarity with the principles will enable you to think through **what kind of information you need** from the initiative (for example, business plans, staff training records and so on). It will also allow you to think about **who you need to ask** about each of the principles in order to score them — and therefore the kind of approach to take to conduct the assessment and validate the findings (for example, key informant interviews, direct observations, focus groups, stakeholder workshops).

You may wish to circulate copies of the framework to key stakeholders in the initiative ahead of the assessment, so they are also familiar with it and understand what you are trying to achieve. Copies of the framework can be downloaded here: [bit.ly/5d-assessment](https://bit.ly/5d-assessment)

## Step 2. Practise with the scoring tool

Download the scoring tool, available at [bit.ly/5D-framework](https://bit.ly/5D-framework), and save it on your computer. Make sure you understand how it is structured, with the list of principles and accompanying criteria. The first tab of the tool provides instructions for its use. Read them well in advance of your assessment and ensure you understand them.

Try entering scores into the scoring column to see how the scores you enter generate different shapes on the resulting radar charts. Play around with the tool until you are confident with how it works.



## Step 3. Decide how to conduct the assessment and make arrangements

If you have chosen a stakeholder workshop to undertake your assessment, you will need to secure a location to hold it (or set it up online), identify the key participants and send out invitations. Similarly, if you plan to conduct a series of interviews, allow sufficient time to identify the interviewees and schedule appointments with them. If you are planning to visit an enterprise as an independent researcher, secure agreement with the enterprise owner/manager first, ensuring the relevant people you wish to speak to are available and understand what you are trying to do.

In a workshop scenario, either one person could conduct the assessment ahead of the workshop and then the results could be shared, discussed and amended where needed in a multi-stakeholder meeting. Or you could complete the assessment collectively through the workshop process (appendix 2 provides some guidance on workshop facilitation and rapporteuring techniques).



## Step 4. Scoring for real using the criteria

When you are ready to start your assessment, download the scoring tool and save a copy of it on your computer with the name of the enterprise you are assessing in the title. This will ensure you don't confuse your real assessment with any practice versions, or if you are assessing multiple enterprises, they are not confused with each other. Make sure the relevance column (column D) and the scoring column (column F) are blank and don't include any leftover practice entries.

Once you are sure you have a clean sheet, you are ready to begin.

Work through the principles one by one. Start by asking, is this principle relevant to this initiative/enterprise/value chain? If the principle is relevant, mark the cell in column D 'Y' and if it is not, enter 'N'. This is important because the tool automatically adjusts the final result to take into account the number of principles that are relevant.

If the principle is NOT relevant, make a short note in column G to explain why this is the case.

### Why might a principle NOT be relevant?

Not all of the 42 principles are relevant to all species use initiatives or enterprises. For example, none of the animal welfare principles will be relevant to plant use initiatives. But some of the animal welfare principles may not be relevant to animal use initiatives either. For example, if the use is focused solely in the wild and there is no "catching, maintaining, breeding, raising, transporting, handling (and, where relevant, killing)" then animal welfare principle number 3 will not be relevant. Similarly, if the species use does not involve "Facilities (including vehicles and equipment) handling wild species" then health principle number 2 is not relevant.

If the principle IS relevant, assign a score between 0 and 3 in column F according to which of the four criteria listed in column E is most applicable. Each principle has unique criteria but in each case they are associated with a score. A score of 0 indicates bad practice while a score of 3 indicates best or exemplar practice, as follows:

1. **Bad practice:** no alignment with the principle (no measures in place)
2. **Emerging good practice:** some but insufficient alignment with the principle (major gaps, only partial measures in place)
3. **Good practice:** good alignment with the principle overall but some weaknesses (for example, most but not all aspects considered)
4. **Exemplar or best practice:** completely meeting or exceeding the principle

Once you have allocated a score, record your reasoning or the evidence to support your score in column G. You can provide links to any evidence in column H if, for example, there is further information online.

Work through all 42 principles, checking relevance and scoring each one in turn, recording your reasoning and providing evidence until you have completed them.

Principle	Principle relevant? (Y/N)	Scoring criteria for relevant principles Not assessed (performance against this principle has not been assessed in this review, please provide explanation why in rationale section) 0 = <b>bad practice</b> , no alignment with the principle (no measures in place) 1 = <b>emerging good practice</b> , some but insufficient alignment with the principle (major gaps, only partial measures in place) 2 = <b>good practice</b> , good alignment with the principle overall but some weaknesses (eg most but not all aspects considered) 3 = <b>exemplar or best practice</b> , completely meeting or exceeding the principle	Score (0-3)	Rationale for score or for non-applicability of principle or for principle not being assessed
There is a current formal/informal system (eg, management plan) in place which considers and governs the scale and rate of use of the target species, in its harvest range taking into account its life history and strategy, and tailored to the local social and ecological context	Y	0: no formal or informal management plan or equivalent exists 1: a formal or informal management plan exists but is not comprehensive, is not tailored to the species life history and strategy or the local context, or is outdated 2: a comprehensive and current formal or informal management plan exists, including specifics to the species offtake and management to the local context 3: a comprehensive and current formal management plan exists, including specifics to the species offtake, and management that is recognised and endorsed by multiple stakeholders	2	There is a clear management plan which specifies the harvest rate and harvest season and includes provisions for monitoring.

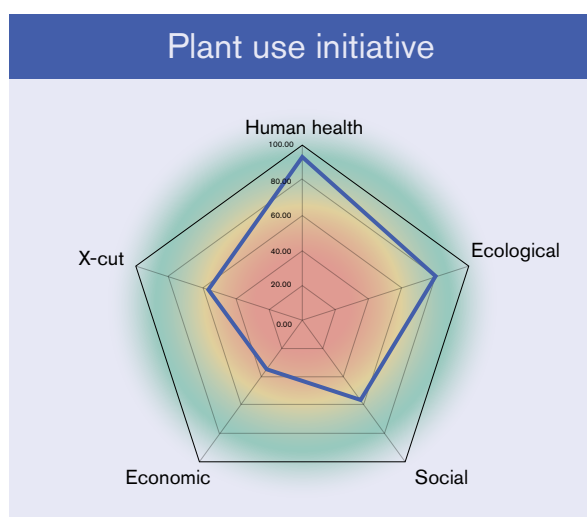
**Figure 5.** Where to add scores and record reasoning or evidence in the scorecard

## Step 5. Interpreting your results

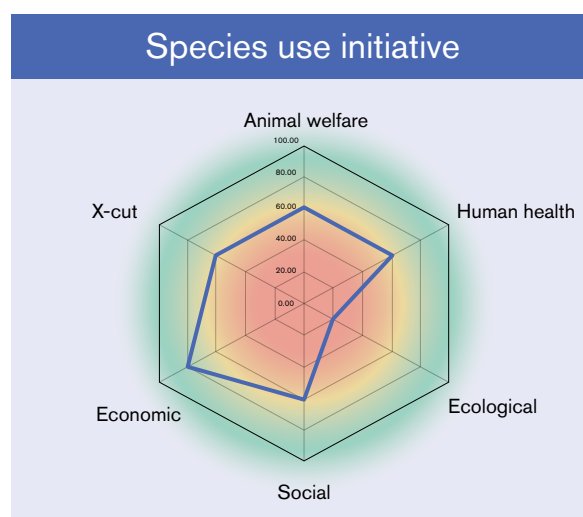
When you have scored all the principles that are relevant to the initiative/enterprise you are assessing, the tool will automatically generate a radar chart to visualise the results. You can find the radar chart for the enterprise you have assessed by clicking on the results tab of the tool. It can be interpreted as follows:

- The radar (or spider's web) has six 'spokes', each representing either one of the five dimensions or the cross-cutting principles. If you are assessing plant use then obviously none of the principles in the animal welfare dimension will be relevant and your chart will then only have five spokes (four dimensions plus cross-cutting, see Figure 6).
- The lines between each of the spokes — the web — show levels of performance: the lines that are closest to the outside of the web (in the green zone) indicate high performance against a maximum possible score for that dimension of sustainability (taking into account any principles that are irrelevant), those that are closest to the middle (in the red zone) indicate poor performance.
- The shape with a dark outline in the middle of the web represents the enterprise you have assessed.
- The specific shape is determined by how well or badly the enterprise has scored against each of the dimensions: where the shape is reaching close to the outside edge of one of the six spokes, it is performing well and where it is remaining close to the centre of the web it is performing badly.
- To better understand how each dimension has performed, refer back to the scores assigned to each principle.

For the hypothetical enterprise illustrated in Figure 7, we can see it is performing well against the economic sustainability principles (the point of the shape extends into the green zone for the economic spoke); it is performing averagely against the social, human health, animal welfare and cross-cutting principles (the points of the shape are extending into the yellow zone); and it is performing badly against the ecological principles (the shape is in the red zone for these spokes).



**Figure 6.** Results radar for a hypothetical plant use initiative



**Figure 7.** Results radar for a hypothetical species use initiative

## Case study. Radar chart results for crocodile enterprises in Zimbabwe



In Zimbabwe, crocodiles are farmed to produce leather for the luxury fashion industry, as well as being trophy hunted. The two radar charts below show different results for these different uses. Crocodile trophy hunting (chart A) scored poorly on human health, mainly because there was a severe lack of oversight of key principles governing the handling of trophy-hunted carcasses, including an absence of meat processing facilities or handling protocols.

Crocodile ranching/farming (chart B) scored highly across the board, reflecting the main market of luxury skin fashion houses, which tend to have high standards, including in animal welfare.<sup>15</sup> Poor husbandry protocols on crocodile farms, such as suboptimal water quality or stocking rates, readily translate into skin imperfections, which in turn lead to low prices. Therefore, close attention is paid to these conditions. Economic sustainability is however becoming increasingly challenging due to declining demand for animal-based products in the luxury fashion sector.

Chart A

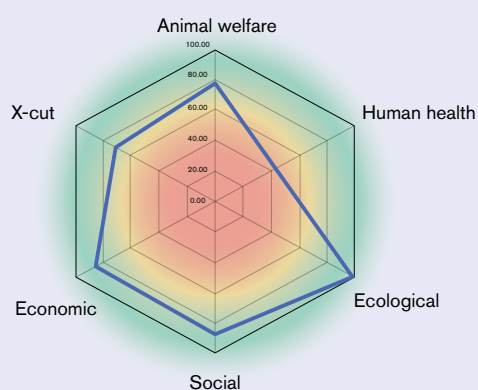
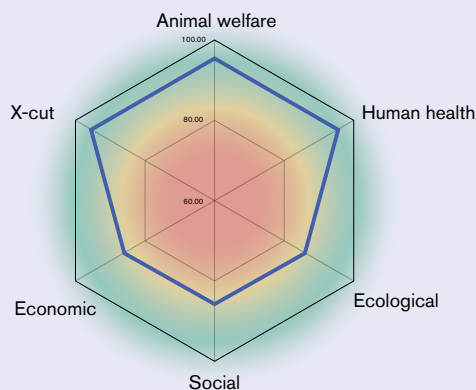


Chart B



## Step 6. Validating your results

If you are an independent researcher or an expert reviewer, it will be important at this stage to provide feedback to the stakeholders involved with the species use initiative, to share your findings and check if they agree or disagree with you. It may be possible that you scored some principles incorrectly, or have missed some vital evidence or information that may change one or more scores. The process of validation can also generate some useful discussions and help inform the next step — action planning.

If you are the owner/manager of the enterprise and have conducted a self-assessment to inform management practices, this validation step may be less relevant. However, if you have any workers or other stakeholders associated with your enterprise, it may still be useful to share your findings with them to gather feedback on your assessment. Again, this discussion will likely generate some ideas for step 7.

## Step 7. Planning for continuous improvement

Assessing how an enterprise performs against the principles provides a great opportunity to highlight areas for improvement — assuming the enterprise owner/manager is interested in achieving best practice. Step 6 (results validation) can provide an invaluable opportunity to discuss the findings and identify areas where improvements are needed. This step then provides a chance to outline specific actions to make those improvements.

Click back to the assessment sheet tab in the tool. Actions for improvement can be recorded against each principle — where needed — in column I. These actions can be as short or as detailed as the enterprise owner/manager finds useful. The purpose is to generate an action plan that is realistic and easy to follow.

Principle	Score (0-3)	Action plan for improvements
The species use does not adversely affect the conservation status of the target species in its harvest range. This includes population, structure and distribution, and genetic diversity	0	<ul style="list-style-type: none"> <li>✓ Include non-target species into management plan</li> <li>✓ Include no-use zones in non-target species breeding areas</li> </ul>

**Figure 8.** Where to record actions for continuous improvement in the scorecard

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Saltwater crocodile (*Crocodylus porosus*)

# 4. Next steps – help us refine and improve this toolkit

The 5DSAF has been piloted in Tanzania (the newly created game meat industry), Zimbabwe (crocodile farming and crocodile trophy hunting), Indonesia (snake farming) and South Africa (game ranching).

The pilots provided proof of concept that the 5DSAF is:

- a) useful as a management tool at an enterprise level;
- b) meaningful for evaluating entire industry sectors;
- c) straightforward to apply and;
- d) provides insights into the ‘safe’ element of Target 5, as well as the more conventional aspects of sustainability and legality.

Over time, we hope the 5DSAF might progress from a self-assessment tool to the gold standard used by government, private sector and civil society actors to assess the sustainability, legality and safety of all value chains for wild species and products.

We welcome feedback on the application of the 5DSAF. If you use it, please complete the feedback form here: [bit.ly/42Xsst0](https://bit.ly/42Xsst0)

This will tell us how easy it is to use, what approach you took, how long it took, how useful it was and any stakeholder feedback you received. Please also share the results of the assessment with us if you are willing to do so.



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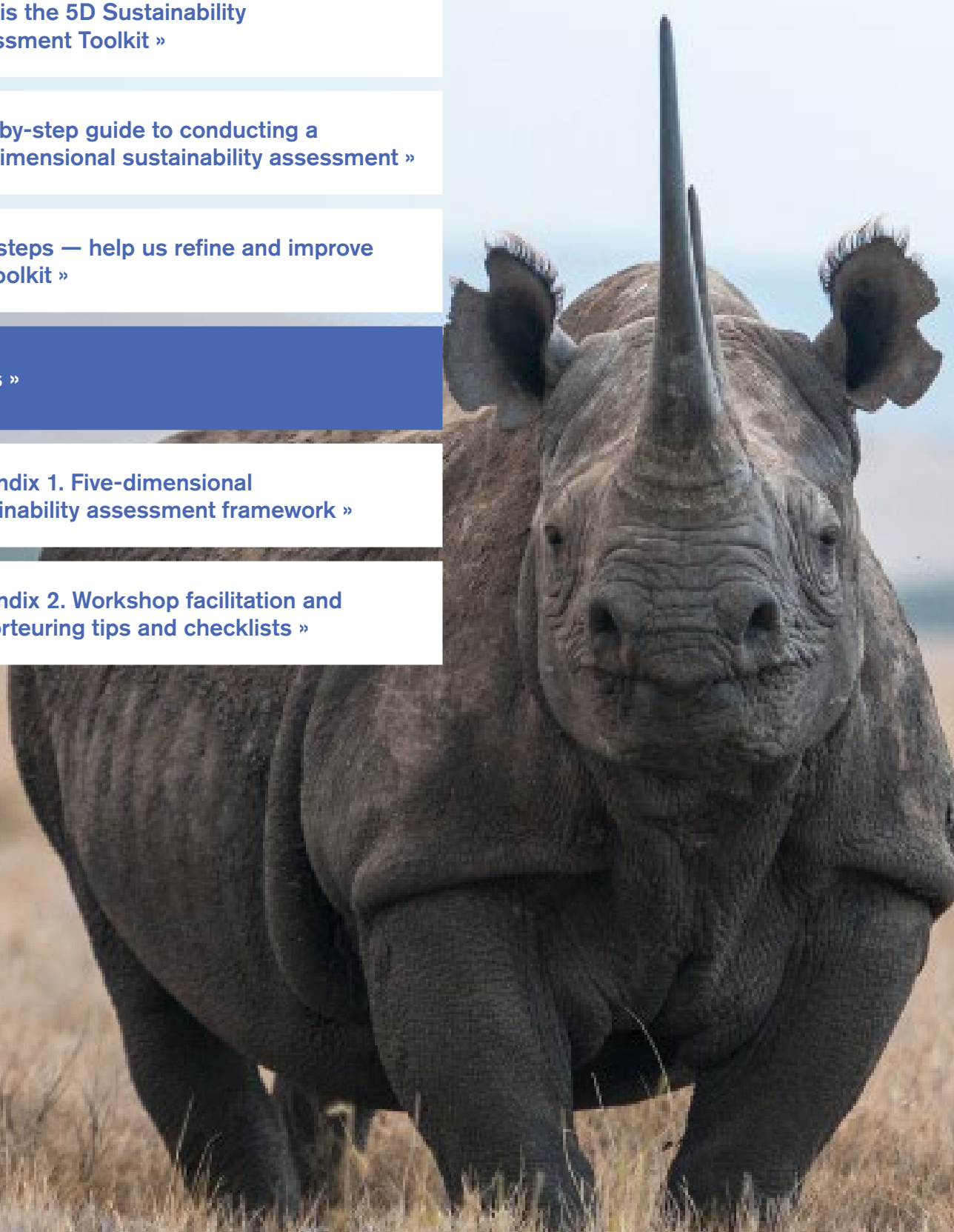
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Black rhinoceros (*Diceros bicornis*)

# Notes

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 <p>Animal welfare</p>	 <p>Human health</p>	 <p>Ecological</p>	 <p>Social</p>	 <p>Economic</p>
<p>Captive or enclosed animals are provided with, or have access to, species-specific and appropriate nutrition, feed and water, which encourages natural behaviours and promotes health</p>	<p>People coming into contact with/working with wild species and their products (including in production facilities, markets, slaughterhouses and so on) understand and practise good personal health and hygiene measures and biosecurity</p>	<p>There is a current formal/informal system (for example, species or area management plan) in place that considers and governs the scale and rate of use of the target species in its harvest range, taking into account its life history and strategy, and is tailored to the local social and ecological context</p>	<p>The use (harvesting, processing, sale and so on) of the species does not involve any harmful discrimination (for example, gender-based, race-based or any other barriers to effective participation and leadership)</p>	<p>There is a formal/informal business plan in place that specifies the likely market for the product/output of the species use</p>
<p>The captive or enclosed environment allows for species-specific comfortable resting places, free and normal movement, substrates and apparatus, thermal regulation and adequate shelter</p>	<p>Facilities (including vehicles and equipment) handling wild species and/or their products (particularly food) have appropriate biosecurity, hygiene, food safety and sanitation measures in place to monitor, minimise and mitigate the risk of disease or hazards and cross-contamination/transmission</p>	<p>The species use is aligned with international national, regional and/or local/customary plans for sustainable management, conservation or restoration/regeneration of biodiversity</p>	<p>Indigenous Peoples and local communities with legal or customary access and/or use rights are able to maintain control over the species use to the extent necessary to protect their rights, traditional knowledge, and customary institutions and uses</p>	<p>There is an enabling environment (for example, policy, legislation and incentives) supporting the species use and no external factors (for example, pressure groups, conflict, political insecurity, global pandemics) undermining its financial viability</p>
<p>The catching, maintaining, breeding, raising, transporting, handling (and where relevant, killing) of animals is carried out in a way that promotes physical and psychological welfare, minimising the risk of pain, injury or disease</p>	<p>Activities involving any interactions with wild species and products are planned, organised and performed in a manner that enables health and safety risks to be identified and appropriate avoidance, minimisation and mitigation measures put in place</p>	<p>The species use does not adversely affect the conservation status of the target species in its harvest range. This includes population, structure and distribution, and genetic diversity</p>	<p>Agreements with Indigenous Peoples and local communities are based on free, prior and informed consent (FPIC), and appropriate and adequate knowledge of customary tenure and access rights</p>	<p>There is a competitive market for the outputs/products of the species use</p>
<p>Stocking densities and group composition of captive or enclosed animals ensure (most) normal behaviours, and positive species-specific social interactions</p>	<p>Condemned, decaying, contaminated or toxic plants, sick animals and mortalities do not enter human food chains. Sick animals are investigated and either quarantined for treatment or euthanised and disposed of according to strict health and safety protocols (for example, no contact with body fluids)</p>	<p>The species use does not adversely affect the conservation or restoration/regeneration of non-target elements of biodiversity (for example, non-target species, ecosystems, ecological processes, natural habitats, or soil and water condition and quality)</p>	<p>Where the species use occurs on sacred sites or other lands and waters traditionally occupied or used by Indigenous Peoples and local communities, a protocol or code of conduct is in place to regulate the behaviour of personnel and visitors</p>	<p>The type of use of the species (for example, hunting, tourism, ranching) and/or product (for example, skins, resin, meat) is competitive with other available alternatives and does not sacrifice the persistence of the resource</p>

 <b>Animal welfare</b>	 <b>Human health</b>	 <b>Ecological</b>	 <b>Social</b>	 <b>Economic</b>
<p>The catching, maintaining, breeding, raising, transporting, handling and slaughtering of animals is carried out in a way that does not facilitate disease or parasite transmission</p>	<p>Trade chains are as short and simple as possible to reduce the number of interfaces at which there could be cross-contamination and transmission of hazards/pathogens, and to facilitate traceability</p>	<p>The species use does not facilitate the introduction or spread of invasive or non-native species that have a detrimental conservation impact</p>	<p>Fair employment conditions and labour rights, which maintain or enhance social and economic wellbeing, are provided for all workers including no use of any forced labour, including child labour</p>	<p>The species use makes a positive contribution to local economic development and potentially also to sub-national or national economies (for example, GDP contributions)</p>
<p>Captive or enclosed animals with physical or psychological health issues are isolated (where appropriate) and treated/addressed promptly or killed humanely if treatment is not feasible or recovery is unlikely</p>	<p>An inspection and/or surveillance system is in place to detect signs of disease/pathogens in both animals and people working with animals</p>	<p>Practices involved in the use of the species do not result in pollution, and are efficient in terms of energy and water use and minimise waste generation</p>	<p>The use of the species does not result in the undermining or physical or economic displacement of local communities/segments within a community (for example, traditional women harvesters displaced by commercial collectors)</p>	<p>Economic relations (prices, rates of pay, payment schedules and so on) in the supply chain are understood and acceptable to those involved</p>
<p>People working with animals have sufficient knowledge and understanding of animal behaviour and physiology to ensure good care practices and welfare standards are applied</p>	<p>People working with wild species and their products have appropriate safety and hygiene training, working environments, equipment and practices</p>	<p>Practices, processes and facilities associated with the species use do not have a negative impact on areas important for biodiversity including, for example, High Conservation Value areas, Protected Areas, Key Biodiversity Areas, ICCAs and OECMs</p>	<p>The use of the species makes a positive contribution to the wellbeing of local communities in the area where the wild species is harvested</p>	<p>The revenue generated by the species use initiative allows for long-term viability and investment in the restoration and maintenance of the resource</p>

◀ **Cross-cutting principles** ▶

Wild species use operations and practices are compliant with applicable local, regional, national and international legal regulations

Wild species use operations and practices take note of, and apply, existing authoritative best practice guidance where relevant

Wild species use operations and practices are subject to regular monitoring (of disease/health, species population, social context and of the impacts of any processes involved in the use) to facilitate adaptive management

Wild species use operations and practices adopt a precautionary approach, ensuring risks are anticipated, assessed and addressed in ways as to mitigate or minimise adverse conservation and social consequences

Wild species use operations and practices are well-governed and based on robust institutions, demonstrating clearly defined roles and responsibilities, accountability and transparency

Wild species supply chains are traceable from the point of off-take and there are systems in place for monitoring

People working with wild species are provided with sufficient training and awareness to ensure compliance with relevant best practices and regulations

The framework is available separately here: [bit.ly/5d-assessment](https://bit.ly/5d-assessment)

A close-up photograph of a stack of cut logs, showing the concentric growth rings of the wood. The logs are piled together, and the background is a clear blue sky with a few white clouds. The lighting is bright, highlighting the texture of the wood and the bark.

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# Appendix 2. Workshop facilitation and rapporteuring tips and checklists<sup>15</sup>

## Guide for facilitators


**Good facilitation is critical to the success of a workshop.** It is, however, not an easy role, requiring patience, skill and practice. The facilitator is responsible for introducing, guiding and managing the flow of the toolkit exercises. Therefore, they must know when to probe for further details, while also being mindful that discussions keep to time and remain relevant.


Additionally, the facilitator must ensure that everyone in the room is heard, creating a safe space in which quieter voices feel valued and able to contribute to discussions. With this in mind, the following points (adapted from Ada Consortium)<sup>16</sup> provide useful guidance for the facilitator before, during and after the exercises.


## Before the exercises


 **Put yourself in the participants' shoes:** facilitators should ask themselves: “How would you feel if a stranger came into your community and began asking questions about your daily life and the challenges you face?”. Some communities may have had a bad experience in the past with other exercises, surveys or researchers, while some participants may be afraid of what will happen to them if they speak openly about their lives. Others may tell facilitators what they think they want to hear, perhaps to be polite or because they hope to benefit in some way. Therefore, facilitators should keep discussions as informal and relaxed as possible, and avoid making promises of future action they are unable to keep.


## During the exercises


 **Learn from them:** throughout the workshop, remind participants of the purpose of the exercises, what the information will be used for and that the facilitators are there to work with — rather than against — participants. Additionally, make it clear that the participants are the teachers, and the facilitators have come to listen and learn from them.


 **Create a 'safe space':** make it clear to all in the room that certain ground rules apply during the exercises. Everyone should be able to speak without fear of punishment, negative consequences or mockery. Furthermore, everyone should appreciate and respect each other's input. In essence, the room represents a 'safe space'.


 **Ask open questions:** avoid closed questions where possible. For example, instead of asking "Do you do this activity?", the question should be "Which activities do you do?". Open questions like this allow participants to provide more detailed explanations and responses. Using the words 'how', 'what', 'where', 'when', 'who' and 'why' is a good way to ensure you're asking open questions.




 **Be conscious of your own opinions:** it is very easy to facilitate discussions that confirm a facilitator's own point of view. Therefore, facilitators should be mindful of the influence their behaviour, background and assumptions may have on the questions being asked and the opinions engaged with. Asking open questions helps address this issue, as it generates a wider range of answers. Interest should be expressed in participants' opinions and facilitators must be prepared to accept opinions different from their own.

 **Be conscious of nonverbal and verbal communication:** according to research,<sup>17</sup> human communication consists of 55% body language, 38% tone of voice and only 7% words. Facilitators should therefore be aware of their body language and demonstrate interest in what participants are saying by maintaining eye contact (if culturally appropriate), pausing to show they are listening, and smiling or nodding to show encouragement. Tone of voice should be kept soft and welcoming.



 **Actively listen and be curious:** facilitators should listen carefully to what participants are saying and encourage them to speak more, with follow-up questions asked if further information or clarification is required. This helps discussions to 'flow' more easily, with participants doing most of the talking.

 **Manage dominance — allow the quiet to speak:** while it may be helpful to have talkative, dominant individuals who can express their opinions clearly and lead a discussion group, the ultimate aim is to solicit a wide range of opinions from different people in the community. Facilitators should therefore try to avoid one or two individuals dominating the discussion, politely but firmly asking them to pause so that others can have their say. Furthermore, facilitators should actively invite less vocal participants to speak, in order to capture their opinions.

 **Manage disagreement:** it is possible to learn a lot when participants disagree about issues and actively engage in lengthy discussion. However, sometimes disagreements can become too heated, causing an unpleasant and hostile group atmosphere. Facilitators must manage these tensions as they arise, reminding participants of the 'safe space' principles agreed and reassuring them that everyone's opinion will be heard and noted.

-  **Allow discussions to flow:** in the event that participants start discussing and questioning issues with each other, facilitators should refrain from interrupting them. Instead, this offers a good opportunity to listen to contrasting opinions, and gain understanding of different points of view, who holds them and why. However, if discussions become too heated, or head in an irrelevant direction, facilitators should intervene to steer the conversation in a calmer or more relevant direction.
-  **Do not rush or force engagement:** facilitators should not worry overly if the exercise concludes without obtaining all the information needed. The tone of the discussion should be kept as informal and conversational as possible to facilitate engagement, but if participants become tired or unresponsive, they should not be forced to continue. Facilitators must be sensitive to this and not push participants to discuss anything they would prefer not to.
-  **Use examples from real life:** the toolkit exercises require participants to consider aspects of their environment or culture that they may not have thought about before. Therefore, some of the ideas and words used may be new or unusual for them. If participants appear unable to understand what a facilitator is saying, it may help to use practical examples from their everyday life.

## At the end of each exercise

-  **Thank participants for their time:** at the end of each exercise (and the beginning of the next), thank participants for their time and active engagement. It is important that they are made to feel appreciated.
-  **Leave flipcharts and exercises with participants:** leave the physical records produced by the exercises with participants. Rapporteurs should take photos of the flipcharts to write up in their report.

## Summary checklist: facilitators

### Before exercise

- Put yourself in participants' shoes, imagining any fears and uncertainties they may have and how they may be put at ease

### During exercise

- Introduce toolkit's objectives and purpose
- Learn from participants
- Create a safe space through mutual respect, confidentiality and voluntary engagement
- Ask open questions, using 'how', 'what', 'where', 'when', 'who' and 'why'
- Listen actively to discussions, asking follow-up questions if clarification is required
- Invite quieter voices to speak and ensure their opinions are captured
- Manage dominance by politely but firmly asking individuals to pause so others can have their say
- Manage disagreements by insisting on mutual respect and allowing everyone to state their point
- Do not interrupt, intervening only if discussions become heated or veer off topic
- Be prepared to accept opinions different from your own
- Be conscious of your own body language, tone of voice and language used
- Do not rush or force engagement (stop or take a break if participants are feeling tired)

### End of each exercise

- Thank participants for their time
- Leave flipcharts with participants, having captured relevant information in photos or notes

## Guide for rapporteurs

The rapporteur (or note-taker) has perhaps the most important job of all, as without detailed notes, the time spent on the activities may be wasted and any lessons learned lost.

Rapporteurs should make a record of all discussions taking place, not just general points or conclusions. They should also write down who in the group holds particular views, noting whether this is potentially representative of a wider group in the community or if there may be opposing opinions. This is especially important during group consensus meetings. Throughout all the exercises, rapporteurs should be ready to pause discussions to clarify that they have correctly heard and understood what has been said. Additionally, they should capture notes in a language they are comfortable with, translating them later if necessary.

It is normal for different people to have their own note-taking style and techniques, perhaps using shorthand or abbreviations. However, rapporteurs must be able to accurately decipher what they write in the workshop. It may help to review their notes at the end of each day, filling in details while they are still fresh in their mind. After the workshop, they should expand their temporary notes into a format comprehensible to the report writer.

### Summary checklist: rapporteurs

- Record all details of discussions (not just general or final points)
- Identify issues or topics where individuals had different opinions, and record whether common agreement was found
- Pause discussions as necessary to ensure what was said has been fully understood and accurately recorded
- Write notes in a language you are most comfortable with (translations can be done later)
- Review notes at the end of each day and add any relevant detail
- Take photographs of all materials (diagrams, timelines, flipcharts, tables and so on) produced during exercises
- Ask permission if quoting participants in published or public documents



Knowledge  
Products

## Toolkit

May 2025

### Biodiversity; Natural resource management

*Keywords:*

Wildlife, biodiversity and conservation, local communities, Global Biodiversity Framework, UN Convention on Biological Diversity (CBD)

Billions of people across the world use wild species — for food, medicine, recreation and income, as well as a wealth of other purposes. It is estimated that between 3.5 and 5.8 billion people (between 40% and 70% of the world's population) use thousands of wild plant, animal and fungus species and products in raw or processed forms.

It is central to the identity and culture of many Indigenous Peoples and local communities, and may also be central to the local and national economies of many countries.

Unsustainable, over-exploitation of wild species is, however, one of the key drivers of biodiversity loss. It is therefore critical that use of wild species is sustainable.

Sustainability more broadly is commonly described with three dimensions: ecological, social and economic. For some, this three-dimensional view of sustainability is not enough. However, there is no straightforward way to determine if use, harvesting and trade is sustainable, safe and legal.

Nevertheless, those working in sustainability need an approach that cuts through the complexity, is accessible to conservation practitioners and policymakers, and aligns with the Global Biodiversity Framework. To meet this need, a group of like-minded organisations collaborated to develop a novel five-dimensional framework for exploring wild species use. This toolkit provides details about the framework and how to apply it.



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