



REDD+ ACADEMY

Learning Journal

Nesting Approaches for REDD+



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Welcome & introduction

Welcome to the Learning Journal on Nesting Approaches for REDD+

This Learning Journal was developed for the revitalized **REDD+ Academy**. It aims to bridge the understanding and practical application of nesting, which entails aligning REDD+ initiatives across various geographical and administrative scales into a consistent accounting system at the jurisdictional (national or subnational) scale, with consideration of key governance and safeguards aspects.

Who is it for?

This Learning Journal is intended to serve as a guide for **government practitioners**, but may also be of interest to **project developers, public and private funders** and **REDD+ technical assistance partners**.

At a glance

The Journal includes information on **what** nesting is, **why** nesting might be needed, **how** and when nesting approaches may be developed and implemented, and **what** actions may be needed to ensure adequate carbon accounting, governance and safeguards approaches across multiple scales of REDD+ implementation. It features **case studies** and **examples**, exploring challenges, opportunities and emerging good practices in developing nesting approaches for REDD+, and includes considerations related to gender. The Journal highlights crucial considerations to help inform the design of nesting approaches that can enhance integrity and enable access to and scaling up of forest carbon finance. The Journal also includes a **Nesting Decision Tree** to help guide decision-making on nesting. This tool facilitates preliminary discussions and aids in the eventual design of nested approaches tailored to each specific case.

How to make the best use of this Learning Journal



Read the key chapters of relevance to you.



Download this publication at [REDD+ Academy Platform](#) and use the online version to access all hyperlinks in the text.



As a practitioner, reference the sections linked to your nesting stage.



Utilize it as a supplement for any lifelong learning opportunities.



Use the QR CODES to access the additional online tools to reinforce your knowledge.



Check your knowledge before starting. What do you already know about nesting in REDD+? Go to the [REDD+ Academy Platform](#) and answer the preliminary test questions to find out which topics you already are familiar with and which ones you need to learn more about.



LEARNING TOOL

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Acronyms

AD:	Activity Data
ARR:	Afforestation, Reforestation and Revegetation
ART-TREES:	Architecture of REDD+ Transactions-The REDD+ Environmental Excellence Standard
BVCM:	Beyond Value Chain Mitigation
COP:	Conference of the Parties
EF:	Emission Factor
ER:	Emissions Reduction
ERPA:	Emissions Reductions Purchase Agreement
FCPF:	Forest Carbon Partnership Facility
FPIC:	Free, Prior and Informed Consent
FREL:	Forest Reference Emissions Level
GCF:	Green Climate Fund
GHG:	Greenhouse gas
GRM:	Grievance Redress Mechanism
IC-VCM:	Integrity Council for the Voluntary Carbon Market
IP:	Indigenous Peoples
IPCC:	Intergovernmental Panel on Climate Change
JNR:	Jurisdictional and Nested REDD+
LC:	Local Communities
LTS:	Long-Term Strategies
LULUCF:	Land use, land-use change, and forestry
MRV:	Measurement, Reporting and Verification
NDC:	Nationally Determined Contribution
NFMS:	National Forest Monitoring System
PA:	Paris Agreement
RBP:	Results-based payments
REDD+:	Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
SIS:	Safeguards Information System
SOI:	Summary of Information
TFCI:	Tropical Forest Credit Integrity
UNFCCC:	United Nations Framework Convention on Climate Change
VCM:	Voluntary Carbon Market
VCMI:	Voluntary Carbon Markets Integrity Initiative
VCS:	Verified Carbon Standard
WRI:	World Resources Institute

Module 1

Introduction: What is driving the REDD+ nesting discussions?



This module

Explains the concept of nesting, aligning REDD+ activities across scales for carbon accounting. It highlights governance, safeguards, challenges, opportunities, and emerging best practices.



You will be able to...

- Define the concept of nesting in REDD+ and identify key milestones in its evolution, including relevant UNFCCC decisions and frameworks.
- Explain the rationale for integrating REDD+ initiatives across different scales and describe how nesting can enhance the integrity of carbon accounting and reporting.

1.1 What is nesting?

While there is no official definition of nesting in the REDD+ context, some common definitions agree that it involves aligning REDD+ initiatives across multiple geographical and administrative

scales into a consistent system at the jurisdictional (national or subnational) level. The concept of nesting in REDD+ is multifaceted, with varying definitions provided by different stakeholders and standard-setters (see Box 1).



Box 1

How is nesting defined?

Various stakeholders and standard-setting bodies in the REDD+ space have included different elements in their definitions of nesting, some of which are below:

“The coordinated and harmonized implementation of REDD+ programs and activities at multiple accounting scales and governance level within a country.”¹ (World Bank)

“A set of provisions by which project-level emissions accounting and social and environmental safeguards are aligned with higher-level jurisdictional systems.”² (Verra)

“The integration of the design and implementation of REDD+ activities at multiple scales within a jurisdiction to align the accounting of smaller-scale activities with jurisdictional systems and with national reporting.”³ (ART-TREES)

“Nesting refers to aligning the accounting of greenhouse gas (GHG) emission reductions and removals across scales. Nested REDD+ systems align accounting and reporting of GHG emission reductions and removals from Avoided Deforestation projects and jurisdictional REDD+ programs. By integrating the accounting frameworks for different types of REDD+, nesting harmonizes the climate benefits of land-use activities implemented at different scales, helps to manage leakage, and enforces environmental safeguards.”⁴ (Climate Focus)

There are common themes across these definitions. These include the alignment and integration of REDD+ activities and accounting at multiple scales, from national to subnational and project. The World Bank highlights the need for coordinated and harmonized implementation across different governance scales within a country. Verra and ART-TREES both focus on

aligning project-level activities with higher-level jurisdictional systems, ensuring consistency in emissions accounting and addressing and respecting social and environmental safeguards. Climate Focus emphasizes the integration of accounting frameworks to manage leakage and harmonize climate benefits across scales.



The common viewpoint is that **nesting aims to create cohesive and efficient frameworks** to help **ensure accurate and consistent accounting and reporting**, while enhancing the positive environmental and social impacts of REDD+ initiatives.

1.2 Nesting in the context of REDD+

Discussions on REDD+ began in 2005 as part of United Nations Framework Convention on Climate Change (UNFCCC) negotiations, with inclusion in future UNFCCC Conferences of the Parties (COPs). Key Decisions include the Bali Action Plan (decision 1/CP.13),⁵ the framework for REDD+ under the Cancun Agreements (decision 1/CP.16),⁶ the adoption of the Warsaw Framework for REDD+ (decisions 9-15/CP.19),⁷ and the inclusion of REDD+ in Article 5 of the Paris Agreement (CP.21). In addition, the Paris Agreement calls for strategies to achieve countries' individual Nationally Determined Contributions (NDC) to climate change mitigation; 33 per cent of developing country Parties mention REDD+ activities as part of their climate mitigation ambition in their NDCs.⁸ The 2023 Global Stocktake also emphasizes the importance of halting and reversing deforestation and forest degradation and calls for funding of these efforts through results-based payments and other means.⁹

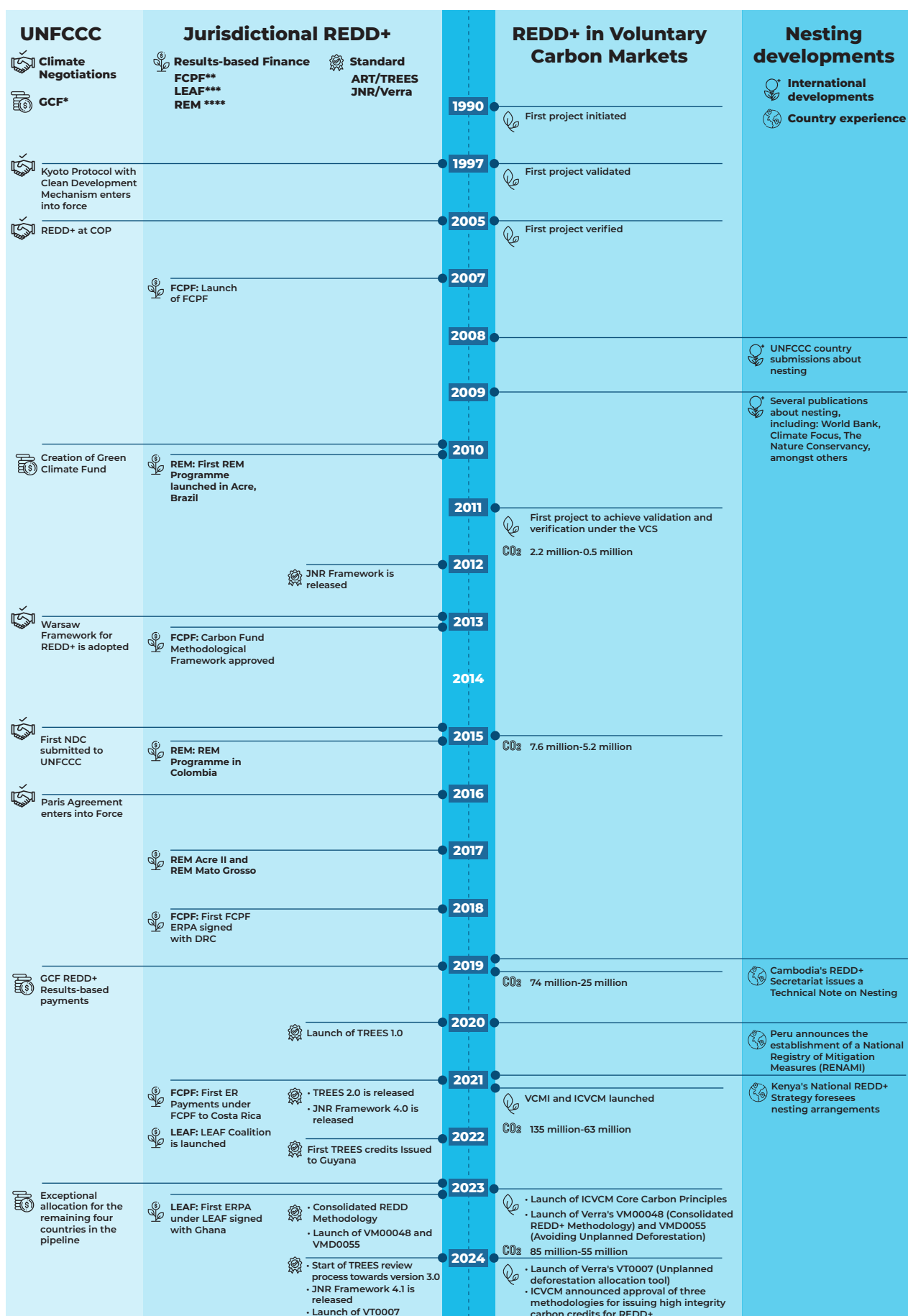
UNFCCC agreements for REDD+ establish that countries develop National Forest Monitoring Systems (NFMS) and Forest Reference Emissions Levels (FREL), along with REDD+ national strategies or action plans, and apply and report on REDD+ safeguards through safeguards information systems (SIS) and periodic reports to the UNFCCC (summaries of safeguards information). Greenhouse gas (GHG) sources and sinks including from land use and forests must also be transparently and consistently tracked, including both GHG inventories as well as NDC progress. Although climate targets are defined at the national level by Parties to the UNFCCC, subnational approaches to REDD+ are recognized as interim measures, particularly as many forest countries are federations with strong subnational governance.

During the time it took to agree on the rules for REDD+ under the UNFCCC, some countries made progress on approaches that would allow for the scaling up of activities from subnational to national scales over time, with the flexibility to credit individual project activities while transitioning to a national approach. In fact, various submissions to the UNFCCC in 2008 highlighted the benefits and challenges of integrating subnational and national activities within a nested framework. For example, Nepal proposed a nested baseline as an effective technical policy measure. Paraguay, on behalf of Argentina, Honduras, Panama and Peru, proposed to put forward a flexible and inclusive approach to REDD+ known as the Nested Approach. Vanuatu mentioned that it is useful to consider how national-level and nested project-level commitments around baselines could be denominated in carbon stocks.

The Warsaw Framework⁷ initially defined three phases for countries to progress through in order to receive results-based payments for REDD+ at the national, or as an interim measure subnational, scale: readiness, implementation and results-based payments. However, often in parallel to these jurisdictional-scale efforts, REDD+ projects have been implemented on smaller scales, generating carbon credits sold through compliance and voluntary carbon markets. In fact, before the Warsaw Framework and the Paris Agreement, projects within developing countries could generate carbon units that could be sold in international voluntary carbon markets without concern about how such sales affected overall country-level mitigation performance.

The Paris Agreement¹⁰ in particular, changed the picture for developing countries. Firstly, countries committed to setting and meeting their NDC mitigation targets, which may reduce opportunities to transfer units internationally.

Figure 1: Key milestones related to REDD+ nesting

(Adapted from <https://vcprimer.org/wp-content/uploads/2022/01/vcm-explained-chapter13-1.pdf>)

Furthermore, it provided countries with core principles, such as environmental integrity, transparency, accuracy, completeness, comparability, consistency and avoidance of double counting when accounting for their NDCs.

Some key moments in the evolution of nesting in the REDD+ context are shown in Figure 1.



Go to the [REDD+ Academy Platform](#) to see an interactive version of a timeline on key moments in the evolution of nesting approaches, and learn more.



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Status as of September 2024

- * The Green Climate Fund (GCF) launched a REDD+ results-based payments (RBP) pilot programme in 2017, allocating all of the USD 500 million funding to 8 countries by 2020. As of September 2024, the GCF is considering options for mainstreaming REDD+ into its regular programming.
- ** The Forest Carbon Partnership Facility-Carbon Fund (FCPF-CF) was set up to pilot incentive payments for REDD+ efforts in developing countries and is due to close in 2025.
- *** The Lowering Emissions from Accelerating Forest Finance (LEAF) Coalition mobilized USD 1 billion of finance in 2021 to pay for emissions reductions at a guaranteed floor price of USD 10 per tCO₂e for the crediting years 2022-2026.
- **** The REDD Early Movers (REM) Programme is a multi-donor results-based payment programme initiated by the Government of Germany and implemented through KfW Development Bank with bilateral programmes in a limited number of countries / jurisdictions.

After the Paris Agreement, some voluntary carbon standards started to develop guidelines and methodologies considering nesting approaches, with provisions to align project-level emissions accounting and social and environmental safeguards with higher-level jurisdictional systems. One notable example is the Jurisdictional and Nested REDD+ (JNR) framework¹¹ developed by Verra, which provides comprehensive guidelines for integrating project-level activities with broader jurisdictional programs, aiming for consistency and accuracy in carbon accounting across different scales.

Beyond Verra, other standards and organizations have also developed methodologies considering nesting approaches. For instance, the Architecture for REDD+ Transactions (ART)¹² developed the TREES (The REDD+ Environmental Excellence Standard) framework to provide guidelines for high-quality carbon credits, and similarly supports the integration of project-level activities with national and jurisdictional efforts.

Since around 2018, several countries have been working toward the development and implementation of nesting approaches within their REDD+ strategies. While some countries have focused more on developing a national regulatory framework, others have concentrated on addressing technical issues to facilitate the integration of subnational and national REDD+ activities. Some of these experiences are explored in subsequent sections of this Journal.

1.3 Focus on integrity

Recently, some standalone REDD+ projects that implement emissions reduction (ER) activities and income generation initiatives, have faced criticism over methodologies for quantifying carbon credits. Concerns have been raised about baseline-setting methods that may overestimate the carbon benefits of projects, with concerns about additionality – that is, whether and how much the project contributes to emissions reductions that would not have taken place in absence of the project activities.^{13, 14, 15} There have also been concerns related to leakage – the displacement of deforestation or forest degradation to other areas – and double counting – including counting, claiming or using credits more than once for the same emissions reduction. Other concerns, particularly in Indigenous territories, include projects that have been implemented without appropriate consultation and free prior and informed consent (FPIC),¹⁶ or adequate benefit-sharing arrangements.^{17, 18, 19} Increasingly, issues related to REDD+ projects have led governments to step in with more regulations, in some cases declaring outstanding agreements void.²⁰

These issues have contributed to increased scrutiny regarding the integrity of credits²¹ (Box 2), with growing attention paid to both the supply and demand sides. For example, on the supply side, the Integrity Council for the Voluntary Carbon Market (IC-VCM) emphasizes the need for effective governance and avoiding double issuance in its Core Carbon Principles (2024).²² These principles include aspects related to governance, tracking, transparency, validation and verification, additionality, leakage, permanence, robust quantification, no double counting, sustainable development benefits and contribution toward net zero transition. There is also a growing focus on the demand side for ensuring high integrity in companies' engagement with carbon markets, for example through the Voluntary Carbon Markets Integrity Initiative (VCMI)²³ and the Science Based Targets Initiative (SBTI).²⁴



REFLECTION POINT

What have been some of the key moments in the evolution of nesting approaches?



Box 2

What is integrity?

In the context of the UNFCCC, the concept of environmental integrity historically focused on transparency of carbon accounting methodologies, reporting of achievements and clarity of claims. Basic requirements of integrity have been to demonstrate additionality, permanence and avoidance of leakage. Integrity has been used more recently by the UN-REDD Programme and others to refer to emissions reductions generated at the jurisdictional level (including nested projects) with strong compliance to social and environmental safeguards, and measured, reported and verified following international best practices in carbon accounting.²⁵ The Paris Agreement, and specifically Article 6, refers to the importance of ensuring environmental integrity in addition to robust accounting. The definition of integrity has evolved especially for some market mechanisms and may be more stringent than UN frameworks used for results-based payments when the units are used for offsetting. Nesting can be an essential part of integrity as it helps to avoid double counting and over-crediting, while enhancing carbon accounting systems.

In addition, as the private sector seeks to meet its own climate mitigation targets, decarbonizing the value chain is becoming a focus for many companies, several of which are looking at so-called “Beyond Value Chain Mitigation” (BVCM),²⁶ to accelerate the global net-zero transformation by going above and beyond science-based targets to contribute to global climate change mitigation goals. Guidance from the Science-Based Targets Initiative for companies seeking to make BVCM investments includes purchasing jurisdictional REDD+ credits. The World Resources Institute (WRI) and the Tropical Forest Credit Integrity (TFCI) Guide also advise buyers to choose credits from jurisdictional programmes, or projects that are fully nested.^{27, 28}

Facility (FCPF) Carbon Fund. Consolidating the different scales and types of REDD+ activities, in addition to meeting the requirements from multiple carbon standards, has presented a challenge for ensuring integrity.³⁰ Moreover, issues with the integrity of carbon credits and emissions reductions can also compromise the accuracy of countries’ NDCs and can affect the ability of these countries to meet their targets.

Where REDD+ implementation is accounted for at different scales, a nesting approach can be used to harmonize the accounting frameworks to ensure that every emission reduction is accounted for and rewarded only once. This approach requires appropriate governance frameworks and institutional arrangements to integrate REDD+ programmes or projects under the national REDD+ strategy, and the application of broader environmental and social management and safeguards systems. Such an integrated nesting approach can help to strengthen oversight mechanisms and prevent conflict, creating a more coherent and comprehensive system of accountability.³¹ This in turn can provide buyers and donors with clarity and confidence on the climate change mitigation benefits the REDD+ activities provide; allow governments to progress toward emissions reduction goals; enable projects to complete transactions with investors; and fairly

1.4 Why nesting?

Nesting has also become a topic of increasing relevance for governments, as more countries have begun to receive other types of REDD+-related finance as results-based payments.²⁹ A number of countries host REDD+ projects that issue credits through voluntary carbon standards, while simultaneously receiving results-based payments for jurisdictional scale REDD+, for example through the Green Climate Fund (GCF) or the Forest Carbon Partnership

reward project developers and communities implementing REDD+ actions, while ensuring equitable distribution of benefits with a focus on gender as well.

Nesting can help to ensure integrity and address challenges related to different scales of REDD+ implementation. Developing nesting approaches might mean there is a need to strengthen legislative and regulatory frameworks to support the integration of existing projects

within jurisdictional initiatives, and strengthen monitoring and the measurement, reporting and verification (MRV) systems to ensure appropriate accounting, governance and strengthen environmental and social management.

However, it is necessary to first explore some key questions: under what specific circumstances is nesting needed, and which nesting approaches are most appropriate for a given country or jurisdiction?



Key Takeaways

- Nesting in the REDD+ context relates to aligning carbon accounting, governance and safeguards across multiple scales—from project to national levels. This approach helps to ensure a cohesive and integrated framework that enhances carbon accounting consistency and supports broader environmental and social governance and safeguards.
- Enhancing integrity in REDD+, including preventing double counting, leakage, and additionality issues, is essential. Effective governance frameworks and safeguards must be in place to maintain the credibility of emissions reductions while promoting equitable benefits and participation, particularly for marginalized groups.
- Developing successful nesting approaches involves addressing accounting, governance and safeguards challenges.



LEARNING TOOL

Go to the [REDD+ Academy Platform](#) to review the definition and key benefits of nesting in REDD+.





Module 2



To nest or not to nest: Understanding the nesting decision-making process



This module

Outlines how the need for a nesting approach in REDD+ varies by jurisdiction and presents a Decision Tree to help inform decisions on nesting. It addresses context-specific strategies and considerations for aligning multi-scale REDD+ efforts.



You will be able to...

- Describe the factors that can inform the need for a nesting approach in REDD+ implementation, including national strategies and action plans, regulatory frameworks and jurisdictional contexts.
- Use the Nesting Decision Tree to assess the necessity and suitability of implementing a nesting approach for REDD+ in a given jurisdiction, considering factors such as existing scales of REDD+ implementation.
- Assess potential overlaps between different REDD+ scales (national, subnational, project-level) and evaluate their impact on carbon accounting, governance and safeguards aspects.
- Critically evaluate various approaches to managing overlaps in REDD+ implementation, and propose a comprehensive nesting approach that includes harmonized carbon accounting, governance and safeguards aspects.

The need for a nesting approach depends on several factors, including the specific context of REDD+ implementation within a jurisdiction, the national REDD+ strategy or action plan, the

government's approach to achieving its NDC and the existing regulatory framework, among others. Not all jurisdictions may require a nesting approach.

When the decision is made to move forward with nesting, a stepwise approach can be considered, in which actions can be developed or scaled up over time, in line with priorities, resources and capacities.



2.1 Nesting Decision Tree

A **Nesting Decision Tree** (Figure 2) has been developed to help assess the necessity and suitability of implementing a nesting approach for REDD+. By guiding users through a series of key questions, the Nesting Decision Tree

aims to simplify the decision-making process, helping stakeholders to understand essential factors, potential trade-offs and make informed decisions for integrating national, subnational and project-scale REDD+ activities into harmonized systems and approaches. The objectives of the Nesting Decision Tree are to:

- **Determine whether a nesting approach is needed** based on the context and needs of a country or jurisdiction. This ensures that resources are allocated efficiently and that the decision to implement nesting is justified by the context;

- **Support REDD+ policymakers and practitioners in their efforts to appropriately engage relevant stakeholders, including Indigenous Peoples and local communities, with a focus on the needs of women and men, in the nesting process;**

- **Identify the most suitable type of nesting approach**, chosen to work well with the REDD+ efforts in the country and the interaction of multiscale initiatives;

- **Serve as a communication tool** for multiple stakeholders to help explain the rationale and key considerations related to decision-making in the nesting approach;

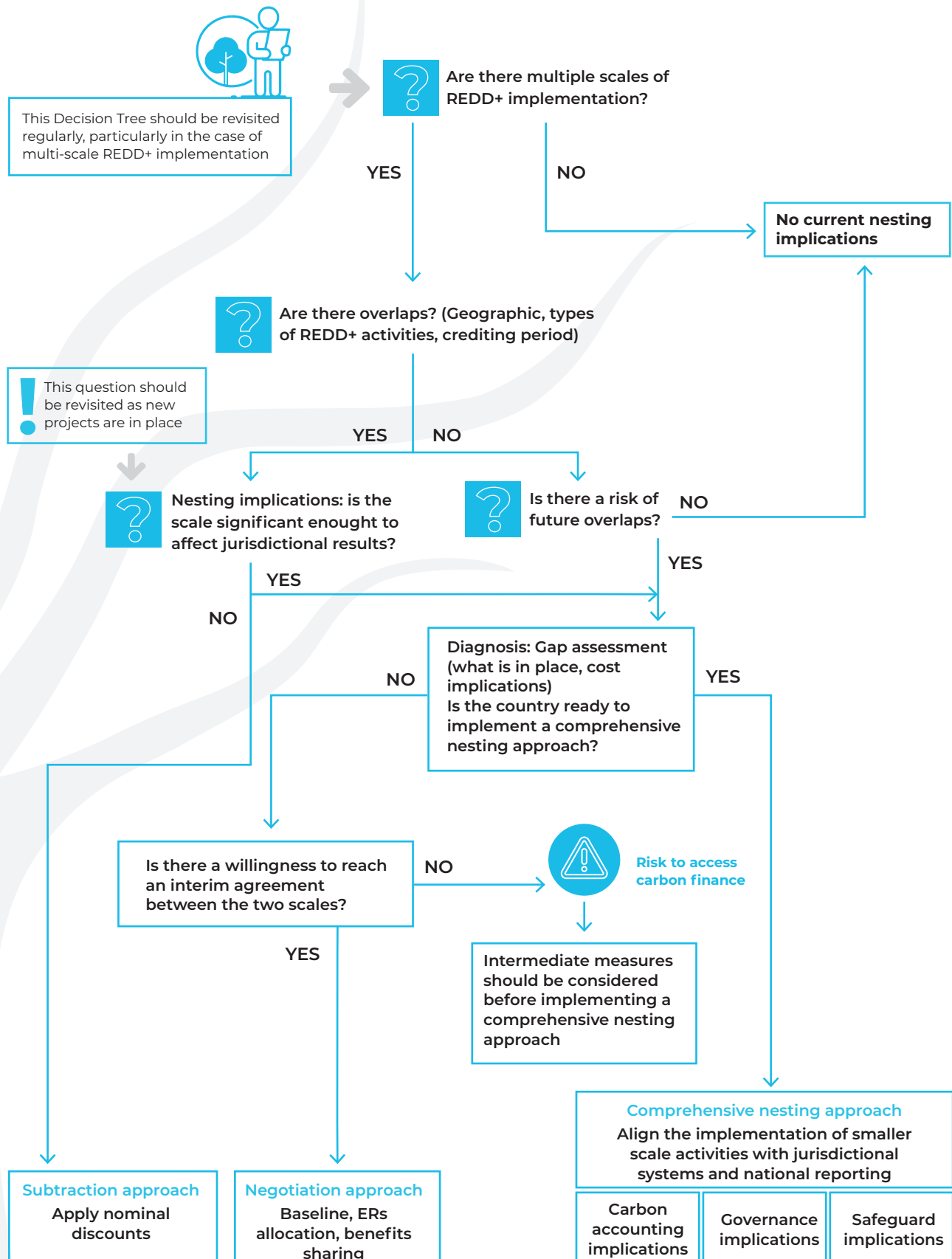
- **Provide guidance on the elements to consider** for developing a nesting approach. This includes considerations for carbon accounting as well as governance and safeguards.



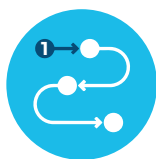
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Go to the [REDD+ Academy Platform](#) to see the interactive version of the Nesting Decision Tree, and strengthen your understanding.



Figure 2: Nesting Decision Tree

Steps for applying the Nesting Decision Tree are described below.



Step 1: Assess multiple scales of REDD+ implementation

In countries where a range of funding mechanisms and scales of REDD+ implementation are present, it is important to ensure alignment among them. Different requirements from multiple funding sources can

pose significant challenges for the accounting and reporting of emission reductions.

The first step is to identify if there are different scales of REDD+ implementation. These scales typically include:



A. National scale

- **Scope:** Implementation of policies, strategies, and REDD+ activities at the national level to address deforestation, forest degradation, and associated emissions.
- **Government authority:** Managed by the national government or a designated national authority.
- **Framework:** Involves setting national Forest Reference Emission Levels/Forest Reference Levels (FREL/FRL), developing legislation and regulations, and establishing monitoring, measurement, reporting, and verification (MRV) systems.
- **Coordination:** Harmonizes efforts across different sectors and stakeholders, including reporting safeguards information through safeguards information systems (SIS) and aligning with the country's Nationally Determined Contribution (NDC).
- **Benefits sharing:** National programmes may have mechanisms for distributing benefits to national, subnational and local entities.



B. Subnational scale

- **Scope:** Implementation of REDD+ activities within specific subnational regions or jurisdictions, such as states, provinces, or districts.
- **Government authority:** Managed by regional or local governments, or other subnational authorities.
- **Framework:** Subnational initiatives may involve tailored approaches to address local drivers of deforestation and degradation, engaging local communities and stakeholders, and mobilizing resources for forest conservation and sustainable management.
- **Accounting:** Issues of comparability, consistency, or double counting may arise if different approaches are used for setting FREL/FRL or for estimating greenhouse gas emissions and removals.
- **Benefits sharing:** Subnational programs may have specific mechanisms for distributing benefits to local communities and stakeholders within their jurisdiction.



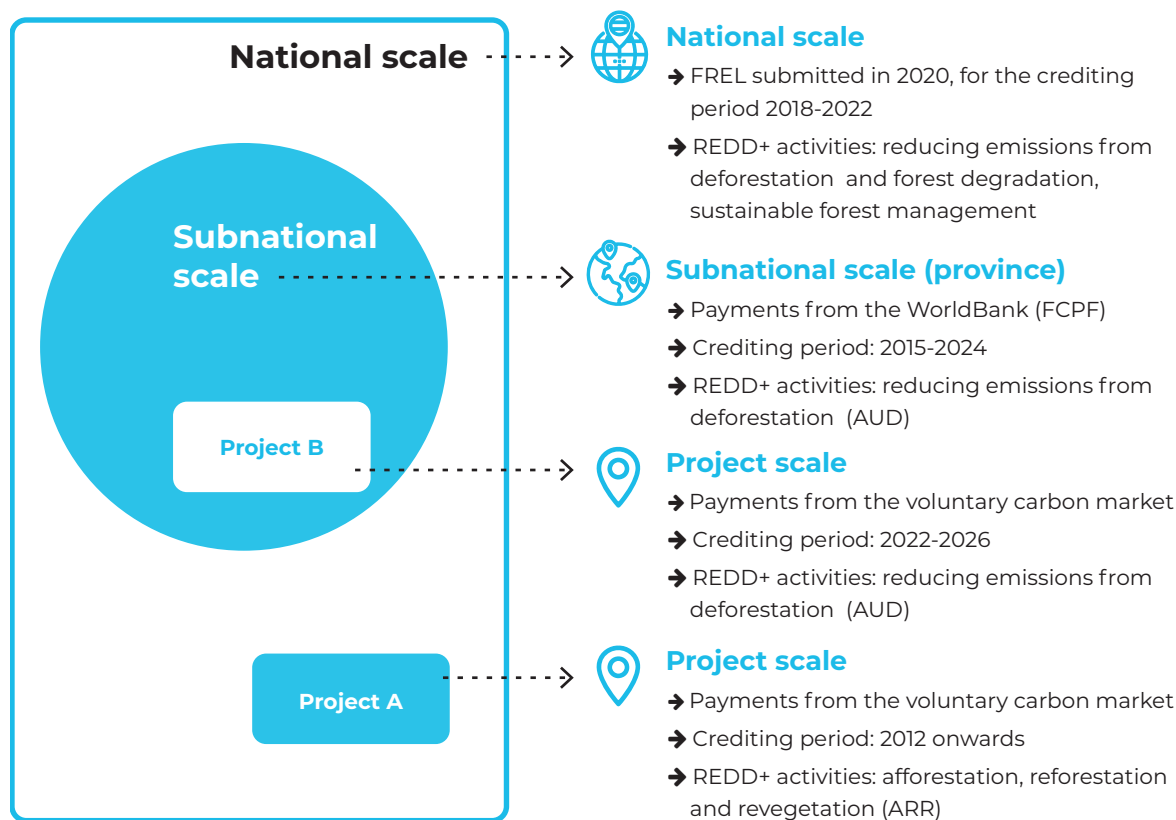
C. Project-level scale

- **Scope:** Implementation of individual projects or initiatives aimed at reducing emissions and promoting forest conservation and sustainable management within specific areas or landscapes.
- **Government authority:** Managed by project developers, which can include NGOs, private companies, local communities, or other stakeholders.
- **Framework:** Projects often focus on activities such as avoiding deforestation and forest degradation, afforestation/reforestation, forest protection, sustainable land use practices, and community engagement.
- **Funding:** Supported by income generated from voluntary carbon markets.
- **MRV:** Typically involves on-the-ground data collection and monitoring, often with third-party verification to ensure accuracy and credibility.
- **Benefits sharing:** Projects often have direct benefit-sharing arrangements with local communities and stakeholders involved in the project.

In scenarios where standalone REDD+ projects co-exist with jurisdictional programmes or results-based payments at the subnational or national scale, nesting can become an important approach to ensure integrity and incentivize financing from different sources. Nesting involves understanding and managing the potential overlaps and interactions between different initiatives and establishing mechanisms to efficiently align them within a unified framework. This approach helps mitigate the risk of double

counting and other accounting, governance and safeguards inconsistencies, while enhancing the overall effectiveness and credibility of REDD+ efforts.

A hypothetical example of a country with a range of REDD+ activities is presented in Figure 3, which will be used to illustrate several scenarios and their implications in the text below.

Figure 3: Hypothetical example of a country with multi-scale REDD+ implementation

Step 2: Identify overlaps

An initial evaluation of the scales at which REDD+ is being implemented, now or in the future, is just the beginning of a nesting decision process. As this process unfolds, the country may wish to assess overlaps between different REDD+ activities in time and space. This may require discussion and coordination with subnational project proponents, as well as with relevant carbon standards. Engaging with various stakeholders early and continuously, through a gender-sensitive and inclusive approach, can provide valuable insights and help streamline the process, making it more efficient, cost-effective, and equitable.

Once it is determined that there are multiple scales of REDD+ implementation, it is important to identify overlaps in terms of 1) the **geographic areas** where REDD+ activities are being implemented; 2) the specific **REDD+ activities** being developed; and 3) the **crediting periods** for these activities.

Using the example illustrated in Figure 3, a country has identified two carbon projects (A and B) and one subnational programme.

When comparing the national and subnational levels, there are notable overlaps in terms of the crediting period (both covering 2018 to 2022), REDD+ activities (both focus on emissions reductions related to deforestation), and geographic areas, as the subnational level is encompassed within the national framework.

At the local level, Project A shows overlap with the national scale in terms of geographic areas and crediting periods, but not in REDD+ activities. While the national framework addresses deforestation, Project A focuses on afforestation, reforestation, and revegetation (ARR), which are distinct activities within the broader climate action strategy.

Project B, on the other hand, overlaps with both the subnational and national levels in terms of geographic areas. It also shares some overlap in the crediting period: its timeframe extends from 2022 to 2026, meaning it overlaps with the national level in 2022 and with the subnational level in 2023 and 2024. Additionally, Project B aligns with both subnational and national levels in terms of REDD+ activities, as it also focuses on deforestation-related emissions reductions.

Project B does not overlap with the national and subnational levels in terms of the crediting period. However, it does overlap geographically and in terms of REDD+ activities.

The subnational programme has an Emissions Reductions Purchase Agreement (ERPA) for activities related to forest conservation and sustainable land management, covering the period from 2015 to 2024. It has already received partial payments for these reductions.

A preliminary assessment indicates that emissions reductions projected by the country for the year 2024 would overlap both geographically and temporally with those projected by Project B and the subnational jurisdictional programme. This suggests a risk of double counting unless appropriate measures are taken to align the accounting of ERs across these different scales:

Another hypothetical example (Table 1) includes a country that has REDD+ initiatives at three different scales

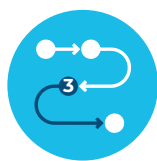
- **National scale:** A jurisdictional programme covering the entire country, aiming to avoid deforestation from 2018 to 2022.
- **Subnational scale:** A subnational programme operates within one region, with a crediting period from 2016 to 2020, focusing on activities to avoid deforestation.
- **Project scale:** Voluntary carbon market (VCM) projects are implemented in small, scattered areas, focusing on afforestation, from 2015 onwards.

In this example, there is overlap in both the geographical area and REDD+ activities between the national and subnational scales, as well as overlapping crediting periods (between 2018 to 2020). Therefore, a nesting approach may be required.

However, at the project scale, the focus is on afforestation, so there is no overlap in REDD+ activities with those at national or subnational scales.

Table 1: Hypothetical example of overlaps in multi-scale REDD+ implementation

	Levels of REDD+ implementation			Identification of overlaps	
	National scale (e.g., ART-TREES)	Subnational scale (e.g., FCPF Carbon Fund)	Local scale (e.g., VCM projects)	Overlaps identified in two scales (national and subnational)	Overlaps identified in three scales (national, subnational and project)
Crediting period	2018-2022	2016-2020	2015 onwards	Yes	Yes
REDD+ activity	Avoiding deforestation	Avoiding deforestation	Afforestation	Yes	No
Geographic coverage	Entire country	One region within the country	Scattered within the country	Yes	Yes



Step 3: Evaluate the impact of overlaps

Once it is determined there is a multi-scale implementation of REDD+ with potentially overlapping claims, the next step is to assess the impact of these overlaps. Depending on the significance of the impact, a few different approaches can be considered.

The significance of the impact refers to how the quantity of emissions reductions from lower-scale REDD+ implementation affects the results achieved at the higher implementation scale. This will depend on various factors, including national circumstances, contextual considerations and carbon accounting analyses.

If no overlaps are identified, it may be worthwhile for the jurisdiction to determine

whether future overlaps are likely. This involves assessing the likelihood of potential new project developments or ambition by sub-national jurisdictions to gain access to carbon finance. Some preliminary conversations with these stakeholders may help determine how these ambitions may affect the national jurisdiction's carbon accounting, and whether it would be advantageous to begin developing a comprehensive nesting approach. The elements of such a system will be explained in more detail in later sections. Here we describe and share case studies for the two simpler approaches illustrated in the decision tree: subtraction and negotiation.



Subtraction or Nominal Discount Approach

If the impact of ERs claims at the lower level is minimal compared to those at the higher jurisdictional or national scales, a subtraction or "nominal discount" approach may be appropriate. This approach is suitable when standalone projects have relatively small ERs claims in comparison to the broader jurisdictional scale.

For example, if Project B from Figure 3 generates a relatively small number of ERs, the country could address the potential overlap by subtracting the verified credits from Project B from its own jurisdictional credit registry. This ensures that the risk of double counting is minimized and maintains the integrity of the jurisdictional ER claims.

This approach is accepted by standards such as ART-TREES, which allows this to prevent double issuance of credits.¹² Although ART-TREES does not directly credit project-level activities, it allows for nesting scenarios where credits verified at the project level are subtracted from the total amount issued to the jurisdiction. This adjustment helps avoid double issuance in cases of overlap.

Ghana exemplifies the application of this approach, as detailed in its ART-TREES monitoring report.³² In Ghana, there are two relevant contexts in which REDD+ activities may generate carbon credits within the designated accounting areas during the ART-TREES crediting period. These are carbon sales to the FCPF Carbon Fund, and Afforestation, Reforestation and Revegetation (ARR) private projects working under the Verified Carbon Standard of Verra.^a

To comply with ART-TREES nesting scenarios and prevent double issuance, Ghana deducts the ERs issued or sold to other entities from the TREES-compliant ER volume before issuing TREES credits. This ensures



REFLECTION POINT

What practical steps can help align carbon accounting when REDD+ projects overlap with larger jurisdictional programmes?

^a In VCS stand-alone projects, the carbon accounting methodology differs from that used in ART-TREES, and assessing removals relies largely on the stock-difference approach from the project's start date. ART-TREES instead, has another accounting approach for commercial forest (the great majority of ARR in the projects) where only planted areas that exceed the average annual area established during the reference period are subject to credits and no legacy removals from areas established before the start of the credit-ing period are included.

Table 2: Ghana's ART-TREES credits: FCPF Carbon Fund subtraction³²

Year	ERs (tCO ₂)	BUft_er (tCO ₂)	LEAKt_er (tCO ₂)	UNCt_er (tCO ₂)	OTRt_er (tCO ₂)	TREES ER, (tCO ₂)
2017	1,815,260	90,763	90,763	290,852	0	1,342,882
2018	4,412,967	220,648	220,648	707,071	0	3,264,599
2019	5,925,401	296,270	296,270	949,402	909,782	3,473,676
2020	6,803,125	340,156	340,156	1,090,037	1,948,129	3,084,647
2021	574,442	28,722	28,722	92,040	888,055	-463,097
Total	19,531,195	976,560	976,560	3,129,402	3,745,966	10,702,707

ERs: Emissions reductions

BUft_er: Buffer applied to the ERs

LEAKt_er: Leakage applied to the ERs

UNCt_er: Uncertainties applied to the ERs

TREES ER: TREES ERs

Table 3: Ghana's ART-TREES credits: ARR project subtraction³²

Year	REMV total (tCO ₂)	BUft_remv (tCO ₂)	LEAKt_remv (tCO ₂)	UNCt_remv (W.02)	OTRt_remv (tCO ₂)	TREES ER, (tCO ₂)
2017	39,035	1,952	1,952	611	53,697	0
2018	199,360	9,968	9,968	3,119	125,408	50,897
2019	557,115	27,856	27,856	8,715	269,130	223,559
2020	754,585	37,729	37,729	11,804	435,552	231,771
2021	1,359,516	67,976	67,976	21,267	503,692	698,605
Total	2,909,610	145,481	145,481	45,515	1,387,479	1,204,832

REMV total: Removals

BUft_remv: Buffer applied to the removals

LEAKt_remv: Leakage applied to the removals

UNCt_remv: Uncertainties applied to the removals

TREES ER: TREES ERs

that ERs are not counted more than once. In the case of emissions reductions (Table 2), ERs from the FCPF Carbon Fund were subtracted from Ghana's estimated ERs (Table 2, column "OTRt_er (tCO₂)").

In the case of Removals (Table 3), ERs from ARR projects were subtracted from Ghana's estimated removals (Table 3, column "REMV total (tCO₂)"). Specifically, ERs from the FCPF Carbon Fund jurisdictional programme were subtracted from the estimated ERs (Table 2), and ERs from ARR projects were deducted from the estimated removals (Table 3).



Negotiation approach

If the impact of the lower level of ERs claims (subnational or project scale) significantly affects the total ERs at the higher (subnational or national) jurisdictional scale, a solution may be reached through negotiations between the lower and higher scales. This can serve as a temporary approach before adopting a comprehensive nesting approach. The feasibility of such negotiations hinges on existing regulations, governance structures, and the relationship between the negotiating parties, including any previous arrangements.

Negotiations can potentially benefit both parties by optimizing emissions reduction efforts and addressing the needs and objectives of all stakeholders. This approach may be more feasible when fewer parties are involved, as negotiations are likely to impact financial viability and project implementation, especially for the implementation of social activities in local communities.

Negotiations might involve changes in accounting elements, such as the quantification of emission reductions, the agreed baseline allocation, and other factors. This could include recalculating the lower-scale baseline to align it with the higher-scale jurisdictional baseline. The feasibility of these adjustments will depend on whether the accounting rules of the carbon standards at each scale of implementation permit such changes.

An example of this approach is from the Democratic Republic of the Congo (DRC). Mai Ndombe province in DRC hosts both a FCPF Carbon Fund programme and a large Verra Verified Carbon Standard (VCS) REDD+ Project, which has been operating since 2012. The project was validated under the VCS standard, with a projected baseline methodology (business as usual) before the FCPF programme, which uses the historical average jurisdictional reference level. The Mai Ndombe Project's crediting period overlaps with that of the FCPF Carbon Fund programme.

Negotiations between the project and the jurisdiction led to two main agreements:

- The VCS Project would reduce its baseline over the ERPA period (2018-2022); and
- The VCS Project could only generate credits against this agreed baseline.

The Mai Ndombe Project average baseline or reference level for the ERPA period was calculated to range from 6.3 to 10.7 MtCO₂eq/year. However, the parties negotiated that the Project would use a reference level of 3.8 MtCO₂eq/year during the overlapping years to align with the provincial/sub-jurisdictional baseline³³ (see Table 4). In this way, the provincial baseline was adjusted to provide a project baseline.

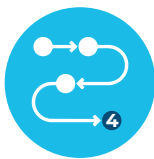
In the monitoring report presented by Mai Ndombe Project to Verra in October 2022 for the year 2021, the Project provided estimates based on both the validated project baseline (Table 5) and the allocated (negotiated) baseline agreed upon with the FCPF programme (Table 5).³⁴

Table 4: Mai Ndombe Project original and modified baseline, after negotiation³³

Mai Ndombe REDD+ Project		
Year	Estimated baseline emissions using VCS VM0009 (tCO ₂ eq/year)	Subproject reference level negotiated for the ER Programme (tCO ₂ eq/year)
2019	8,524,210	3,800,000
2020	9,642,568	3,800,000
2021	10,724,028	3,800,000
2022	11,486,467	3,800,000
2023	12,156,738	3,800,000

Table 5: ERs from the Mai Ndombe Project during the monitoring period under the validated baseline and under the updated negotiated baseline³⁴

ERs from the Mai Ndombe Project during the monitoring period under the validated baseline						
Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Project Gross Emissions Reductions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)	
2021	5,206,921	537,782	0	4,669,139	4,202,225	
ERs from the Mai Ndombe Project during the monitoring period under the updated negotiated baseline						
Year	Project Forest Reference Emission Level (FREL) (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Project Gross Emission Reductions (tCO ₂ e)	Buffer Contribution emissions reductions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2021	3,800,000	537,782	0	3,262,218	326,222	2,935,996
Difference (tCO ₂ e)	1,406,921	0	0	1,406,921	N/A	1,266,229



Step 4: Define the nesting approach

If, after considering previous steps, a subnational or national jurisdiction decides to pursue a more comprehensive nesting approach, there

are three key aspects which may be taken into account to develop a nesting approach.



Carbon Accounting

To ensure harmonized accounting across all scales of REDD+ implementation, it is vital to align the carbon accounting frameworks. This involves standardizing definitions of forests, activity data, and methodological approaches for calculating emission reductions. Key considerations include emission pools and gases, emission factors, and other relevant elements. This alignment helps avoid double counting and ensures consistency in reporting GHG emissions and removals.



Governance

Effective nesting governance requires harmonizing land and carbon rights laws and forest-related regulations across different scales to prevent conflicts and promote coherence among multiple initiatives. Institutions at various levels must collaborate closely through mechanisms for coordination, information sharing, and transparent decision-making. Clearly defined roles and responsibilities are essential to facilitate cooperation among national, subnational, and local entities.



Safeguards

The application, monitoring and reporting of REDD+ safeguards within a nesting approach can integrate information from multiple scales of REDD+ implementation. It is important to align benefits sharing, grievance redress mechanisms, and participation across scales. Transparent attribution of responsibilities ensures effective environmental and social management.



REFLECTION POINT

Using the Nesting Decision Tree, how would you assess the suitability of a nesting approach in the context of your own jurisdiction or a specific region you're familiar with that has multiple scales of REDD+ implementation?

Understanding different contexts for nesting decisions

It may be noted in the examples above (Ghana and DRC), there are jurisdictional-scale emissions reductions that exceed the reductions in the project scale, as measured using the jurisdictional baseline. However, there may also be cases where projects are successful in generating ERs, but the jurisdiction as a whole fails to reduce emissions.

In developing a nesting approach, it is also important to consider the broader context of forest carbon finance opportunities and how they align with the pathways defined to achieve

the country's NDC targets. Mapping these opportunities helps integrate various finance mechanisms and initiatives effectively into the nesting approach.

Jurisdictions may wish to conduct a gap assessment by reviewing the current state of accounting, governance, and safeguards. The next step is to determine the costs, capacity needs, and timeline required to implement the necessary changes. It is also crucial to consider the implications of not adopting a nesting approach. The next Module will explore key considerations for carbon accounting, governance, and safeguards in REDD+ nesting.



Key Takeaways

- This module outlines a stepwise approach to determining if nesting is needed, and potential options for nesting. It involves assessing multiple scales of REDD+ implementation, identifying overlaps and evaluating their impact which can help feed into the development of a comprehensive nesting approach.
- The necessity of a nesting approach for REDD+ depends on several factors, such as the specific context of REDD+ implementation, the scope of the national REDD+ strategy or action plan, and the domestic regulatory framework, among others. Not all jurisdictions will require or benefit from a nesting approach, so the decision to implement it should be based on a thorough assessment of these factors.
- The Nesting Decision Tree is a practical tool designed to guide stakeholders through the decision-making process related to nesting. It helps to determine whether nesting is needed and to identify the most suitable type of nesting approach. It also can serve as a tool to support engagement with relevant stakeholders, ensuring that the approach is inclusive and considers diverse stakeholder needs.
- Practical examples illustrate how different strategies can be applied in real-world scenarios. These examples demonstrate the importance of adjusting methods to fit specific contexts and highlight the need for flexible, context-specific solutions in REDD+ implementation.

Module 3



Key considerations for nesting: Carbon accounting, governance and safeguards



This module

Covers carbon accounting, governance and safeguards, providing practical insights for REDD+ nesting approaches.



You will be able to...

- Analyze how carbon accounting, governance and safeguards are key considerations for the design of a REDD+ nesting approach.
- Understand key carbon accounting aspects for a REDD+ nesting approach.
- Describe the key components and considerations for developing effective institutional arrangements for a REDD+ nesting approach.
- Understand integrated safeguards approaches and their potential role and usefulness in a nesting approach.

This Module explores carbon accounting, governance and safeguards aspects in the context of the development of a nesting approach in more detail. These considerations will help define some of the key questions to shape nesting approaches, such as: what will the system look like? who will lead its design and implementation? who are the other stakeholders involved, and how can Indigenous Peoples and local communities' involvement and a gender approach be ensured? what are the resources needed in terms of finance and technical capacities? And, how much time would it take to design/adopt all the accounting, governance and safeguards elements? This Module highlights examples and case studies from countries and subnational jurisdictions that are currently developing nesting approaches, providing actionable insights for those looking to develop or further understand nesting approaches.

3.1 Carbon accounting in the context of nesting

As mentioned in Module 1, there has been significant recent scrutiny on REDD+ due to challenges across the spectrum of carbon credit integrity, particularly as related to carbon accounting. Accurately measuring the emissions impacts of a REDD+ project is inherently difficult, involves several complex steps and methodologies are evolving at pace. These challenges include estimating the baseline scenario, measuring the carbon stored in forests, accounting for displacement of emissions to other areas outside the project and assessing future reversal risks from both natural and human causes. Accounting integrity at each scale requires setting clear accounting rules, such as regularly updating baselines and measuring results using standardized methods.

A well-designed nesting approach that relies on a robust NFMS can support integrity across scales, by aligning these elements in a transparent way. Strengthening institutional capacities is likely to be essential for a successful nesting processes, with ongoing monitoring of REDD+ activities at national and subnational

levels. Further governance considerations for nesting are explored in the next section.

Accounting in the context of land use, land-use change, and forestry (LULUCF) refers to the process of estimating emissions and/or removals of greenhouse gases using a set of rules towards the fulfillment of a country's pledge (e.g in NDC), as per the Intergovernmental Panel on Climate Change's (IPCC) Good Practice Guidance for LULUCF.³⁵ There is no explicit definition of accounting in the Paris Agreement,¹⁰ rather, it provides core principles, such as those stipulated in Article 4, paragraph 13, (on environmental integrity, transparency, accuracy, completeness, comparability, consistency and avoidance of double counting), which need to be followed by Parties in applying accounting approaches. For NDC reporting, Parties are required to describe the accounting approaches used for targets, the construction of baselines for each indicator. In the context of REDD+, the Warsaw framework⁷ provides guidance on developing baselines (forest reference emissions levels/forest reference levels, FREL/FRL), carbon accounting methodologies, activities and metrics (ton of CO₂ equivalent) for accounting.

Key accounting considerations for a REDD+ nesting approaches are explored below.

3.1.1 Key accounting considerations for REDD+ nesting approaches

The carbon accounting elements of the NFMS and MRV process may be identified and evaluated at different scales to be considered in nesting approaches. These include:

- **Forest definition:** There is a need to adopt a national definition of forests, applicable across multiple scales.
- **Forest stratification:** It is crucial to ensure the stratification follows the IPCC good practices, and is used consistently across multiple scales. Projects may further stratify forests or other land uses, but such additional

strata must be within the strata used for the Reference Level.

- **REDD+ activities:** Determine which activities will be included in the nesting approach. It is not necessary to include all the REDD+ activities. A country could start with the REDD+ activity most commonly implemented at different scales, which may be avoiding deforestation, as the immediate activity to be included.
- **Pools and gases:** Determine which carbon pools and greenhouse gases will be included.
- **Methodology to assess activity data (AD) and emission factors (EF):** It is crucial to align the methodology to be used across multiple scales otherwise, there is a risk that AD or EF data at subnational scale differ substantially from the national data for the same geography.
- **Methodological protocols:** Once the methodologies for AD and EF have been aligned, it is necessary to create protocols for each level of implementation to use and replicate them, promoting consistency. These protocols may be made publicly available.
- **Reference period and monitoring period:** Since a nesting approach aims for consistency in carbon accounting, ideally all the scales of implementation can share the same reference and monitoring periods.
- **Baselines:** Baselines at different scales must be consistent and coherent. The baseline may be conservative and not lead to an overestimation of the tons of carbon dioxide equivalent emitted or removed from the atmosphere.
- **Accounting rules:** This includes defining the methods to monitor, verify and report emission reductions at different implementation scales. This also includes defining the monitoring scheme and the timeline, among other key considerations, with an eye toward future applicability.

These elements can each be analyzed at all scales of REDD+ implementation.

Baseline allocation

A crucial accounting action for a nesting approach is baseline allocation. This method ensures that the “sum of the parts” (project or subnational baselines) never exceeds the whole (the national Forest Reference Emission Level, or FREL). Defining an effective allocation approach is pivotal in preventing project baselines from surpassing jurisdictional baselines. This can involve allocating portions of the national FREL, known as quotas, to lower scales so that the sum of these quotas equals the FREL, or it can involve allocating jurisdictional activity data.

In the context of JNR-Verra, for example, and the new consolidated methodology of Verra (VM-0048) for Avoiding Unplanned Deforestation projects,³⁶ the size of each quota is determined based on the deforestation risk within the project area. Higher-risk areas receive larger quotas, while forests that face negligible risk, such as inaccessible forests, receive no allocation. Assessing deforestation risk involves various considerations. Currently, some countries have used this approach by creating a deforestation risk map based on recent deforestation trends. Some countries are enhancing these maps by incorporating additional layers, such as proximity to roads and settlements.

The allocation approach can become more complex by incorporating other environmental considerations, such as biodiversity and hydrology. For instance, projects located in national protected areas or water recharge zones may receive special considerations within the allocation process. Guatemala’s nesting approach based on quota allocation is described in Box 3.

It is important to note that, currently, the Verra allocation approach only applies to the avoiding of unplanned deforestation activities.



REFLECTION POINT

What are some essential accounting considerations when developing a REDD+ nesting approach?



Box 3

Guatemala's nesting approach based on quota allocation

Guatemala has developed a nesting approach based on quota allocation. Under the FCPF's Carbon Fund, it developed an Approach and Principles of Nesting for REDD+ Initiatives (Projects and Programs)³⁷ to address methodological differences between projects and programmes in the framework of Guatemala's Emission Reduction Programme to ensure that double counting will not occur. This approach uses the following variables to be considered in the distribution of quotas of the FRL: (i) the current forest area within the initiative area (from the previous year of quota allocation) and (ii) the current deforestation/degradation rates within the initiative area (activity data from the two years before the quota allocation year), allocating to each FRL initiative quotas proportional to the combination of both values. In addition to the variables mentioned above, three additional criteria are considered to establish the percentages of quota allocation: (a) protected area management category, (b) water recharge areas and strategic ecosystems, and (c) REDD+ sub-regional map.

Registries and institutional infrastructure to implement accounting rules for nesting

Once a country has established the fundamental elements of carbon accounting, there are various methods to establish associated rules and regulations for nesting approaches. One effective approach to achieving this objective is by utilizing appropriate registries (REDD+ registries or similar).

Registries can serve as vital tools for centrally recording essential information on REDD+, aiding in the integration of projects and subnational emissions reductions into national accounting, and enhancing transparency and traceability of this data. Using a registry can be a highly

efficient method to prevent double counting, also across compliance and voluntary carbon markets. Transparent and accessible registries can help to track emissions reductions from various projects and align project baselines with national FREs/ FRLs.²⁸ Registries can be adapted or expanded to incorporate elements specific to carbon accounting. For example, they can include mechanisms for identifying overlaps, implementing georeferencing rules, mandating the use of allocated baselines, and defining the validity period of these baselines.

Some countries are including nesting elements into their national registries to align the nesting approach with the relevant national regulation (see Peru example in Box 4).



Box 4

Nesting approach in Peru

Peru is one of the pioneers of developing a nesting approach for REDD+. As the national REDD+ authority, the country's Ministry of Environment (MINAM) leads the design and implementation of nesting and establishes the necessary technical and legal framework.

MINAM promotes nesting as a comprehensive and continuous improvement approach that seeks to ensure that all REDD+ actions align with the four REDD+ pillars. This ensures environmental integrity, avoids double counting and places emphasis on sustainable forest management, legal certainty, and incentives for investments with reliable results. As a first step towards the implementation of this process, MINAM makes available key technical inputs, such as the Forest Reference Emission Levels (FREL), annual deforestation maps and the deforestation risk map, to align REDD+ projects^{38, 39} with national accounting. The choice and application of the activity data allocation tool will depend on the standard selected by the proponent and recognized by the National Registry of Mitigation Measures (RENAMI) according to the criteria established therein.

The RENAMI provides a regulatory framework for the implementation of nesting and forms a centralized system through which evidence of land rights and conformance with REDD+ safeguards can be verified. Draft guidelines also distinguish between mitigation activities that count towards Peru's NDC and those which apply for carbon markets. These carbon market mitigation activities are organized by two categories: those which participate under cooperative approaches of Article 6 of the Paris Agreement (which contribute towards the NDCs of other countries), and those which participate under voluntary carbon markets. The use of emission reductions units generated by carbon markets mitigations activities will also be registered in RENAMI, ensuring that there is no double counting. This would then enable the integration of Peruvian and international carbon markets.

Current developments suggest that the RENAMI does not circumvent the need for private registries such as VCS and Gold Standard. Instead, information will be replicated in both RENAMI and private registries. This interoperability with the voluntary carbon market is key for Peru's nesting approach, as many standalone carbon projects are already present in the country.



Go to the [REDD+ Academy Platform](#) to reinforce your knowledge about carbon accounting in the context of REDD+ nesting.



**LEARNING
TOOL**

3.2 REDD+ nesting governance considerations

Nesting approaches and related decision-making present both challenges and opportunities that are unique to each country or local context and have significant implications for REDD+ governance. Governance in the context of REDD+ nesting refers to climate and forest-related policies, laws and regulations, institutional arrangements and decision-making processes that enable the coordinated and integrated implementation of REDD+ initiatives across multiple geographic and political scales.^{40, 41}

A primary governance challenge when implementing REDD+ nesting is the need to operate and coordinate across multiple geographical and political scales. This includes aligning carbon accounting and safeguards aspects, and resolving mismatches between policies, laws and regulations at different scales (e.g., on land rights or on conflicting land use or conservation priorities). An additional challenge refers to balancing diverse stakeholder interests when it comes to claiming the rights to emission reductions and managing the degree of autonomy and legal entitlement granted to multi-level actors. The limited availability of information, experience and empirical evidence regarding REDD+ governance in nesting approach further complicates implementation.⁴² Moreover, establishing appropriate institutional arrangements for operating a REDD+ nesting approach presents its own set of complexities, requiring careful consideration of roles, responsibilities, resources, and coordination mechanisms across scales.

These challenges can be mitigated with a well-designed REDD+ nesting governance framework. Such an approach can help unlock and leverage carbon financing from multiple sources, including the private sector, governments and financial institutions and public donors.^{43, 44} A clear

governance framework is essential to define incentives, manage financial resources to ensure continued implementation on the ground and support ongoing environmental and social risk management.^{45, 46} Some of these governance challenges, as well as potential solutions, are summarized in Annex 1. Governance aspects across scales have implications for related policies, laws and regulations related to REDD+ nesting, which are explored in the next section.

3.2.1 Policies, laws and regulations related to nesting

At the core of the policies relevant to nesting are the pre-existing REDD+ implementation structures and the broader environmental, climate and land use considerations within a national or subnational jurisdiction. Policies, laws and regulations that outline the rules, guidelines and processes for implementing REDD+ will likely already be in place. However, for implementing a REDD+ nesting approach, these may need to be expanded to ensure they are appropriate for the multiple geographic and political scales of nested implementation. Given the multi-scale nature of a REDD+ nesting approach, special attention must be paid to how new and existing policies, laws and regulations are implemented. This includes taking action across all scales of government to ensure clarity and relevance of policies, laws, and regulations; guarantee appropriate stakeholder engagement; foster coordination between relevant institutions; and coordinate implementation efforts. In this regard, carbon rights aspects and addressing and respecting safeguards are also essential legal requirements.⁴⁷ It will also be necessary to ensure that policies, laws and regulations at different governance levels and across different geographical scales do not contradict each other – e.g., regulations on land use, environment and climate, or policies regarding rights to land and carbon.



REFLECTION POINT

What strategies can help to improve coordination across REDD+ initiatives at different scales, while balancing the interests of various stakeholders?

Defining carbon and land rights remains one of the most crucial challenges when implementing REDD+ – and is particularly relevant for nesting. Carbon rights refer to the entitlement to benefits from carbon stored in forests and/or reduced GHG emissions. In this context, national land use and tenure regimes play a pivotal role; different rights may be allocated by governance mechanisms at different scales. Governments must analyze the factors that will be considered for benefit-sharing such as carbon rights, customary practices, and other recognized local approaches. This will ensure that benefits flow equitably and effectively to communities and individuals contributing to ERs. This involves distinguishing rights to the resources, entitlements, tradable carbon credits or units, ownership of ERs generated from

REDD+ activities and access to the benefits, which is critical in defining the benefit-sharing agreements.

Well-defined and transparent procedures and legal considerations for approving and monitoring REDD+ projects are essential to ensure alignment with national REDD+ strategies and climate policies (see Module 3.1). The legal framework may also ensure that national environmental and social management systems and safeguards are consistent with laws and regulations across all scales (explored further in Module 3.3). Some key governance actions to be considered across scales of REDD+ implementation, as relevant for developing nesting approaches, are considered in Table 6.

Table 6: Key governance actions across scales of REDD+ implementation

Governance Elements	National scale	Subnational scale	Project scale
Policies	<ul style="list-style-type: none"> ■ Develop or adapt a national registry to track ERs and monitor nesting implementation ■ Strengthen and adjust NFMS/MRV systems that integrate subnational and project scale data, defining protocols and methodologies for such integration ■ Establish guidelines for carbon trading and transactions for both domestic (if country has domestic crediting programmes) and international markets ■ Establish general frameworks for subnational and local initiatives to distribute benefits and comply with safeguards 	<ul style="list-style-type: none"> ■ Formulate/align sub-national regulations for implementation of national REDD+ strategies or action plans and land/forest management with nesting requirements ■ Strengthen subnational monitoring and enforcement bodies according to nesting functions (technical, operational, resources, capacities, etc.) ■ Strengthen procedures and capacities for environmental and social management and safeguards, and handling grievances and claims related to REDD+ nesting ■ Apply relevant land tenure and spatial planning protocols 	<ul style="list-style-type: none"> ■ Develop nesting guidelines and data-sharing protocols for projects ■ Based on technical analysis and discussions with the developers, define methodological approaches to harmonize project-scale baselines into the jurisdictional (subnational or national) scale ■ Develop transparent benefit-sharing plans, implementation mechanisms, and distribution channels with stakeholders and subnational authorities, aligned with the jurisdictional (subnational or national) scale ■ Align the management of safeguards with jurisdictional (subnational or national) guidelines

Governance Elements	National scale	Subnational scale	Project scale
Laws and regulations	<ul style="list-style-type: none"> ■ Conduct a legal review of REDD+ elements that could be part of nesting approaches, capturing national development and other priorities and climate commitments ■ Establish a multi-scale legal framework to ensure implementation of nesting approaches across scales, aligning and adapting existing elements and creating missing ones (MRV, benefits sharing, etc.) ■ Clarify how rights to land and carbon may be managed within the nested framework, creating mechanisms to resolve potential implementation issues. ■ Facilitate an inclusive dialogue with stakeholders to ensure their input is incorporated while complying with established legal requirements (safeguards, gender, etc.) 	<ul style="list-style-type: none"> ■ Review and adapt subnational regulations to align with national and local contexts, ensuring relevance and applicability ■ Develop and implement legal frameworks that recognize and protect customary land rights, based on national and subnational approaches (states, provinces, etc.) ■ Ensure subnational actions enforce forest laws in line with national legislation ■ Establish subnational and local coordination for grievance redress mechanisms, benefits-sharing mechanisms and land dispute resolution platforms or initiatives 	<ul style="list-style-type: none"> ■ Develop legal guidelines for project developers on compliance with national and subnational laws ■ Establish clear guidelines, tools and protocols for projects related to nesting ■ Ensure adequate legal support and capacity-building for IPs and LCs and IP and LC organizations, to secure land and carbon rights where applicable ■ Implement participatory processes related to the legal framework at the local level (e.g., FPIC and GRM processes)

Governance Elements	National scale	Subnational scale	Project scale
Institutional arrangements	<ul style="list-style-type: none"> ■ Establish permanent multi-stakeholder platforms for decision-making, oversight, and coordination across scales of REDD+ implementation, facilitating integration with other climate and development policy implementation (e.g. inter-ministerial platforms) ■ Build dialogue channels and conduct capacity-building and training to ensure effective multi-scale information flow and capacity-building, with a focus on inter-agency coordination and technical governmental bodies ■ Ensure a cohesive approach across all stakeholders to ensure safeguards implementation and capture local and sub-national demands and needs during the design and operation of the nesting approaches ■ Support the development and coordination of data and inputs for a REDD+ registry, SIS, GRM (as appropriate) and integrate systems related to the NFMS/MRV that facilitate access and distribution of information and results in securing sufficient financing and capacity to operate 	<ul style="list-style-type: none"> ■ Implement capacity-building processes around REDD+ and carbon markets to address emerging conflicts and design spaces for dialogue and capacity-building among subnational authorities and stakeholders. ■ Establish dedicated subnational coordination task forces to oversee the implementation of nesting-related guidelines (MRV, baseline integration, ERs reporting, etc.). ■ Articulate stakeholders' interaction for implementing the nested system and facilitate the inclusion and revision of safeguards, benefit sharing and even new REDD+ actions. ■ Identify local GRM bodies to handle subnational and local grievances, and track and report grievances to national GRM system ■ Establish necessary institutional arrangements to manage and distribute benefits (both national and subnational levels) 	<ul style="list-style-type: none"> ■ Integrate technical and administrative requirements expressed by national government (and demand-side actors – donors, governments or voluntary carbon crediting programmes) for REDD+ projects initiatives. ■ Conduct participatory field appraisals and consultations to understand project implications, forming community-based monitoring/grievance groups aligned with subnational/national guidelines. ■ Report ERs and benefit-sharing outcomes to subnational/national authorities through the MRV, SIS, and Registry platforms. ■ Develop grievance redressal mechanisms, aligned with national/sub-national guidelines, at project level to address local concerns and report to sub-national/national GRM system ■ Implement safeguards, gender and other inclusive and participatory requirements and policies at the project level

An example of policies and regulations in Kenya in the context of developing its nesting approach is highlighted in Box 5.



Box 5

Policies and regulations for nesting in Kenya

Kenya's REDD+ initiatives have been ongoing for many years, primarily at the project scale. Under the Paris Agreement, Kenya is transitioning to implementing REDD+ activities at the jurisdictional level. The government of Kenya has taken various steps to develop overarching principles related to a REDD+ nesting framework and a set of guidelines on nesting. These include the establishment of a National Experts Group on REDD+ Nesting (NEG), analyzing and modifying its forest reference level (FRL), evaluating and clarifying benefit-sharing approaches, and outlining its rationale for supporting REDD+ nesting within its National REDD+ Strategy.⁴⁸

Based partly on Kenya's private community and state forest land tenure context, its active and engaged REDD+ stakeholders and its REDD+ projects, it has been developing an approach in which the private sector and communities are able to generate and trade emissions reductions. This approach also enables the Kenyan state to engage in REDD+ activities in public forests. This approach has been informed by an analysis conducted by the Nested Expert Group led by Conservation International.⁴⁹

Kenya's REDD+ nesting guidelines include a description of the approach, the role of the State Department of Forestry in the nesting process, a transition phase for existing projects, the process for nested and sub-national REDD+ Project Approval, the application process for pre-approval and process for activity approval. The guidelines provide for a decision-making process on approvals as well as benefit sharing and principles for nested REDD+ accounting.

3.2.2 Institutional arrangements for nesting

As highlighted in Table 6 above, there are various considerations related to institutional arrangements for nesting. It is widely acknowledged⁵⁰ that specific arrangements will be required to strengthen the human and institutional resources necessary for the

implementation of effective REDD+ nesting approaches. Additionally, accountability measures that ensure transparency and equitable participation of all stakeholders, especially IPs and LCs, are crucial. The coherence and effectiveness of these multi-scale institutional arrangements are essential for the successful operationalization of nested REDD+ systems.

Specific considerations for strengthening institutional arrangements for nesting include:

1. **Institutional mandates and resources:** Unambiguous delineation of roles, responsibilities, and mandates across government ministries and agencies is imperative for coordinated management of REDD+ activities within nesting approaches. Strengthening of existing REDD+ institutional frameworks through adequate human resources and financial allocations is commonly needed. New or enhanced coordinating mechanisms, such as inter-ministerial committees or multi-stakeholder platforms that facilitate cross-scale collaboration, information sharing, and decision-making among national, subnational, and local actors to define the institutional arrangements can also be considered.
2. **Cross-sectoral and multi-scale coordination:** A nesting approaches can require a shift toward more integrated policymaking, objective alignment, and consensus on multiple forest and land-use priorities across sectors. This challenge transcends jurisdictional levels, potentially requiring the devolution of authority and resources to subnational or local government entities to facilitate effective implementation and monitoring of REDD+ initiatives on the ground. This can enable them to function with greater autonomy and diligence.
3. **Capacity development:** Enhancing technical and administrative capacities at national, subnational as well as local scales is essential. Subnational entities will likely require greater capacity, infrastructure and resources to operate nesting approaches effectively. A key component of capacity development is ensuring the availability of required skills,

expertise, and resources to accurately quantify, monitor, and report GHG emissions and removals, as well as to report on key safeguards and environmental and social management aspects.

4. **Inclusive stakeholder engagement:** Integrating local actions into national and subnational REDD+ implementation necessitates stakeholder engagement through consultative and participatory processes. This approach not only facilitates active involvement of local communities and organisations in decision-making but also presents opportunities to incorporate emerging stakeholders, such as new organisations, communities, or sectors and industries, that may become relevant during the implementation of REDD+ activities across jurisdictional levels. As Kashwan & Holahan (2014)⁵⁰ and Ravikumar, et al. (2015)⁴⁶ suggested, that inclusive multi-stakeholder negotiation processes for nesting can help determine the key stakeholders and their respective roles at the different scales of implementation. Given the complexity of developing nesting approaches, early and ongoing consultation and dialogue with relevant stakeholders involved in the implementation of standalone projects or the administration of initiatives at a jurisdictional scale will be required, including IPs and LCs, and with consideration of the needs of women.

An example of institutional arrangements developed for a nesting approach is presented in Box 6. In the case of Cambodia, a pre-nesting stage was included, in which government officials, technical experts, and other stakeholders were consulted on the scope, scale, and staged approach for developing their nesting approaches, leading to improved coordination and governance aspects.

**Box 6**

Development of REDD+ nesting governance in Cambodia

Cambodia has taken significant steps to align existing and future REDD+ projects with its National REDD+ Strategy,⁵¹ adopted in May 2017. This has taken place through an active dialogue on nesting led by the REDD+ Secretariat under the Ministry of Environment (MoE), beginning in 2018 with a workshop on the nesting topic. In 2019, further discussions were held regarding the objectives of nesting, scales of crediting, and the potential for carbon finance. Subsequent agreements were reached in 2019, focusing on the comprehensive design of the nested framework, and adopting a staged approach to its implementation. Towards the end of the year, the REDD+ Secretariat also issued a “Technical Note” on nesting, outlining its objectives and establishing a timeline. There were further dedicated efforts to develop the regulation and essential elements that would underpin the nesting system.⁵²

The objectives of the nesting system aim to enable multiple sources of finance, supplement government capacity, drive projects to higher-risk areas of deforestation, promote alignment in GHG performance measurement, and support Cambodia’s NDC achievement while avoiding double counting emission reductions. A short official proclamation (called *prakas* in Cambodia) has been drafted to provide official, legal standing for nesting implementation, and Guidelines on the Rules and Procedures for REDD+ Greenhouse Gas Mechanisms have been developed, detailing the nesting system, including roles, responsibilities, registration procedures, eligibility conditions, and enforcement and revision mechanisms.

Cambodia’s nesting approach establishes transparent rules and systems to enable participation in Article 6 and attract diverse financing sources, including the private sector and carbon markets, to support forest and climate goals. It supplements government capacity through site-based REDD+ activities promoting equity and methodological alignment in emissions measurement and reporting. Ultimately, it supports Cambodia’s NDC achievement while preventing double counting of emissions reductions.

The system establishes clear rules and methods for tracking and accounting for emissions reductions and also aims to ensure equitable distribution of REDD+ benefits across multiple levels by integrating technical, procedural, and regulatory components into the national REDD+ regulatory framework.⁴⁷ Since 2023, the new administration in the MoE have been rigorously evaluating the guidelines and legal instruments while simultaneously piloting the main nested components. This comprehensive review aims to refine and optimize the system before its nationwide implementation.

3.2.3 Key considerations for REDD+ nesting governance

As mentioned above, a key challenge of developing a comprehensive approach for REDD+ governance in the context of nesting is the need to integrate different scales of REDD+ activities – national, subnational, and project scales – into a coherent framework that aligns project-scale activities with national strategies and goals. Establishing clear governance guidelines and frameworks on the national scale can help to ensure consistent approaches related to both carbon accounting and safeguards aspects. This can be crucial for maintaining the high integrity of ER results, and appropriate environmental and social management.

Governments may have to develop tailored decision-making and operational frameworks for REDD+ governance in a context of nesting, which include potential legal reforms, as well as the integration of subnational and local governance aspects within the national system.⁵⁰ This could include the consideration of local political dynamics, consultation, and inclusion of diverse stakeholders,⁴⁵ as well as coordination between multiple institutions across scales. The development and operation of the governance system for REDD+ in a nesting approach can be transparent and accountable, with clear and accessible reporting mechanisms, stakeholder consultation processes, and grievance redress procedures.

The following steps can help guide the development of a REDD+ governance nesting approach:

1. **Situation analysis:** Assess what elements of the existing REDD+ governance system could be incorporated into the nesting approach,

which require adaptation and where there are gaps. This includes reviewing policy and finance considerations, government roles, stakeholder engagement in multi-scale initiatives, and relevant aspects related to policies, laws and regulations at different scales.⁴⁶

2. **Stakeholder mapping and engagement:** Undertake comprehensive multi-sectoral and intragovernmental stakeholder mapping at the local, subnational and national scales. Identify potential beneficiaries of REDD+ activities and owners of emissions reductions and ensure their involvement in governance processes.
3. **Governance coordination:** Define means of institutional coordination required at different scales of governance (national, subnational and local). Map existing governance and information flows, decision-making processes, and feasible arrangements to establish a coherent coordination framework.
4. **Development of governance system tools:** Align, adapt and create the necessary governance instruments, such as multi-scale stakeholder engagement strategies, benefits-sharing mechanisms, and registries, among others. Establish the necessary inter-institutional arrangements to facilitate sharing of responsibilities as well as data sharing/accessibility.
5. **Updated arrangements, tracking and periodic review and adjustment:** Periodically review and revise the governance arrangements to reflect evolving national and international policy developments as well as on-the-ground responses. Implement mechanisms to track progress and make necessary adjustments to maintain the system's effectiveness and relevance.



REFLECTION POINT

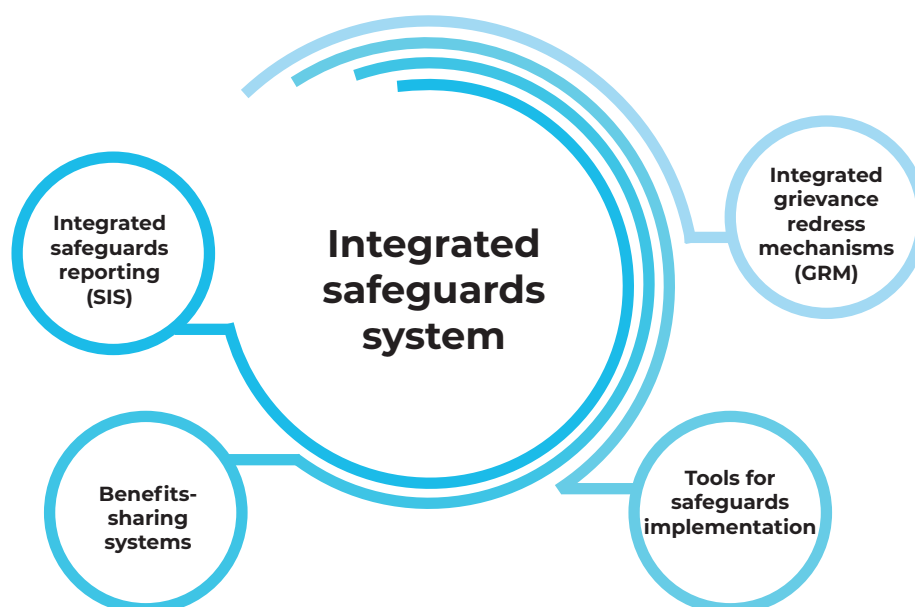
What strategies could be employed to ensure that diverse local voices are effectively included in decision-making processes across national, subnational, and project scales?



Review what you have just learned. Go to the [REDD+ Academy Platform](#) to consolidate your knowledge on how to design a REDD+ nesting governance framework.



LEARNING TOOL

Figure 4: Potential elements of an integrated safeguards system

3.3 Safeguards in the context of REDD+ nesting

Multi-scale REDD+ implementation and multiple finance sources can present a number of challenges related to safeguards, which are principles or measures that aim to avoid, mitigate, minimize or manage risks (“do no harm”), while promoting positive impacts and benefits (“do good”).⁵³ Some common challenges include:

- The implementation, monitoring and reporting on safeguards across multiple scales and types of activities;
- The coexistence of multiple safeguards frameworks (i.e. those of UNFCCC, multilateral development banks, UN agencies, GCF, ART-TREES, bilateral agreements, etc.), standards, reporting mechanisms, and requirements;

- The alignment and integration of environmental and social risk management frameworks at different scales (national, subnational and local), with consistent management, monitoring and reporting measures;
- The need to ensure key safeguards tools and approaches to ensure participation, gender mainstreaming, respect for IP and LC rights, the application of free, prior and informed consent (FPIC), and coherent grievance redress mechanisms, among others.

Safeguards nesting considerations, including through the development of safeguards approaches and tools that are integrated across different scales can help to address these challenges and contribute to ensuring effective safeguards application at different scales. This can help to further promote integrity across multiple financing sources and scales of REDD+.

3.3.1 Integrated safeguards systems

Within the Cancun Agreements,⁶ seven safeguards, also known as the “Cancun safeguards”, were agreed, to be addressed and respected throughout the implementation of REDD+, with information made available through a national Safeguards Information System (SIS), and periodically reported on through the submission of Summaries of Safeguards Information (SOI) to the UNFCCC. The UNFCCC safeguards guidance leaves flexibility for countries to develop their own approaches to meeting these requirements. A number of countries have developed “country safeguards approaches” or safeguards systems as a response to such challenges. These systems are often comprised of:

- National safeguards interpretations (understanding applicable safeguards within the context of a country’s legal and institutional provisions, including policies, laws and regulations, among others);
- Safeguards Information System (SIS);
- Environmental and social risk management systems;

- Stakeholder engagement platforms;
- Grievance redress mechanisms (GRM); and
- Benefit-sharing systems.

Countries or subnational jurisdictions that are developing a nesting approach could adapt or strengthen their existing safeguards systems to include the following aspects (Figure 4), which are described further in the sections below.

3.3.2 Integrated safeguards reporting

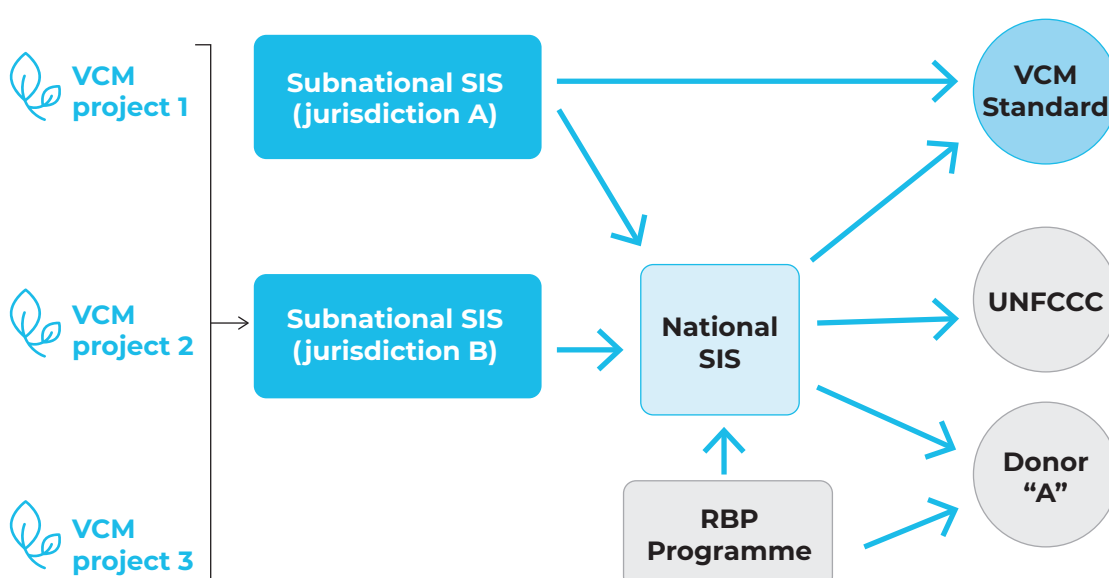
The concept of integrated safeguards reporting refers to designing national or subnational jurisdictional-scale guidance and protocols for applying, monitoring and reporting on safeguards. Integrated safeguards reporting could effectively align safeguards information generated by private, public, or jurisdictional voluntary carbon market projects (e.g., ART-TREES and JNR-Verra) into national SIS, in an integrated and effective way. This may imply or benefit from an active dialogue with different carbon issuance standards, with identification of opportunities for unifying safeguards reporting processes.⁵⁴



REFLECTION POINT

How can an integrated safeguards system help to promote integrity and address challenges related to multi-scale REDD+ implementation?

Figure 5: Potential flow of information for integrated safeguards reporting



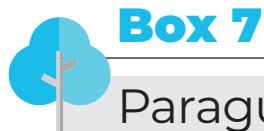
Some potential steps to develop an integrated safeguards reporting system include:

1. **Identify the applicable safeguards and the reporting needs**, based on donor/funder requirements, national goals and objectives as well as resources and capacities;
2. **Conduct a comparative analysis of the different safeguards**, to find out the aspects in common as well as any gaps;
3. **Draft an integrated safeguards framework**, based on the different environmental and so-

cial safeguards and standards of the national/subnational safeguards frameworks, with the participation of key stakeholders;

4. **Assess how the legal and institutional framework supports the implementation of the integrated safeguards approach** and what additional tools and resources may be needed to support the implementation of safeguards.

A similar process took place to develop an integrated safeguards framework and reporting protocol in Paraguay, as described in Box 7.



Box 7

Paraguay's integrated safeguards reporting approach for REDD+

Paraguay is currently implementing a Green Climate Fund REDD+ results-based payments project (called Paraguay+Verde), for results achieved for REDD+ in the years 2015-2017. As with other GCF results-based payments projects, three safeguards frameworks apply to the project: those of the GCF, the UNFCCC, and the Accredited Entity to the GCF (UNEP in the case of Paraguay). To facilitate the integration, implementation, and reporting of safeguards, an alignment exercise of the applicable safeguards and standards for the project was conducted. As a result, nine environmental and social safeguards were identified, to form part of the integrated safeguards framework for Paraguay + Verde:

- S1. Participation and access to information
- S2. Strong employment and labour rights
- S3. Sustainability in the use of natural resources and achieved outcomes
- S4. Health, safety, and climate change adaptation
- S5. Land tenure and resettlement
- S6. Biodiversity, ecosystem services, and protected areas
- S7. Indigenous Peoples, local communities, and cultural heritage
- S8. Equality and vulnerability approach
- S9. Sustainability in forest, agricultural, and livestock production

The Project's safeguards tools, such as the risk screening and categorization forms, FPIC protocols, gender assessment guidance, reporting templates, indicators and others were designed according to these nine safeguards, which at the same time are aimed at reporting to the national SIS.

The approach to creating an integrated safeguards reporting system may vary depending on several factors, including the status and type of REDD+ activities, the scale at which they are being implemented, the legal framework, and budgetary and capacity considerations, among other factors. Some possible approaches might include:

- **Drawing on existing project scale information:** For jurisdictions with an important presence of projects, an integrated safeguards reporting system could be part of a registry of REDD+ activities, with reporting against Cancun safeguards and additional indicators for other funding mechanisms and national policies. For example, project-level information could be extracted from voluntary carbon market registries. Considerations on data collection and flows of information can be defined.
- **Unified safeguards reporting structure:** The national government might include a set of indicators to report on that encompass the national interpretation of Cancun safeguards and other key safeguards, and indicators required for additional funding

sources and national policies. The information recorded could then feed into an integrated safeguard reporting system, with efficiencies on safeguards reporting and potential to demonstrate to new and existing funders appropriate environmental and social management.

- **Inclusion in a REDD+ registry:** A country might require safeguards reporting alongside the registration of REDD+ projects, including private and jurisdictional VCM projects and programmes. One such example is found in Peru's national climate change legislation.⁵⁵ To be registered in the National Registry of Mitigation Actions (RENAMI), projects must meet certain requirements, including meeting and reporting on safeguards indicators. Under such scope, safeguards reporting might work also as a requirement to access funds through benefit-sharing mechanisms.

The integrated safeguards reporting system might draw upon integrated safeguards frameworks and approaches, which seek to harmonize multiple applicable safeguards requirements (see Box 7 for an example from Honduras).



Box 8

Integrated safeguards framework in Honduras

Safeguards+ Honduras was a pioneering initiative that developed a National Safeguards Framework for Climate Change for Honduras (the "Safeguards+ Honduras Framework"), as well as a series of practical tools related to environmental and social risks management for climate change mitigation and adaptation policies, programmes and projects (beyond REDD+), with support from GCF Readiness funding and the United Nations Environment Programme.

The Framework emerged following the request of the Honduran government that wanted to work in a coordinated, participatory manner to improve the understanding and implementation of the different social and environmental safeguards connected with climate change projects in the country. The diverse range of safeguards frameworks and policies had generated multiple international criteria that makes it difficult to understand the application of safeguards and identify opportunities for improvement.

In order to address those issues, the government conducted an analysis of the main safeguards frameworks used by climate mitigation projects in the country and established the "Safeguards+ Honduras Framework". Based on the 12 safeguards frameworks analyzed, the integrated framework developed a set of nine environmental and social safeguards, based on those of international organizations but developed for the Honduran context, such as "Cultural Safeguard" and "Protection of the Safety of Environmental Defenders", among others.⁵⁶

3.3.3 Integrated grievance redress mechanisms

Grievance redress mechanisms (GRM) for REDD+ are designed to receive, channel and respond to stakeholder requests or grievances regarding REDD+ projects or programmes. They can offer affected stakeholders a structured process to voice concerns, seek resolution, and receive remedies, ensuring transparency, fairness and accountability. In the context of nesting, there are challenges related to ensuring alignment across different scales and requirements related to GRM, and also ensuring the information reported feeds into a national (or subnational jurisdictional scale) SIS, as appropriate.

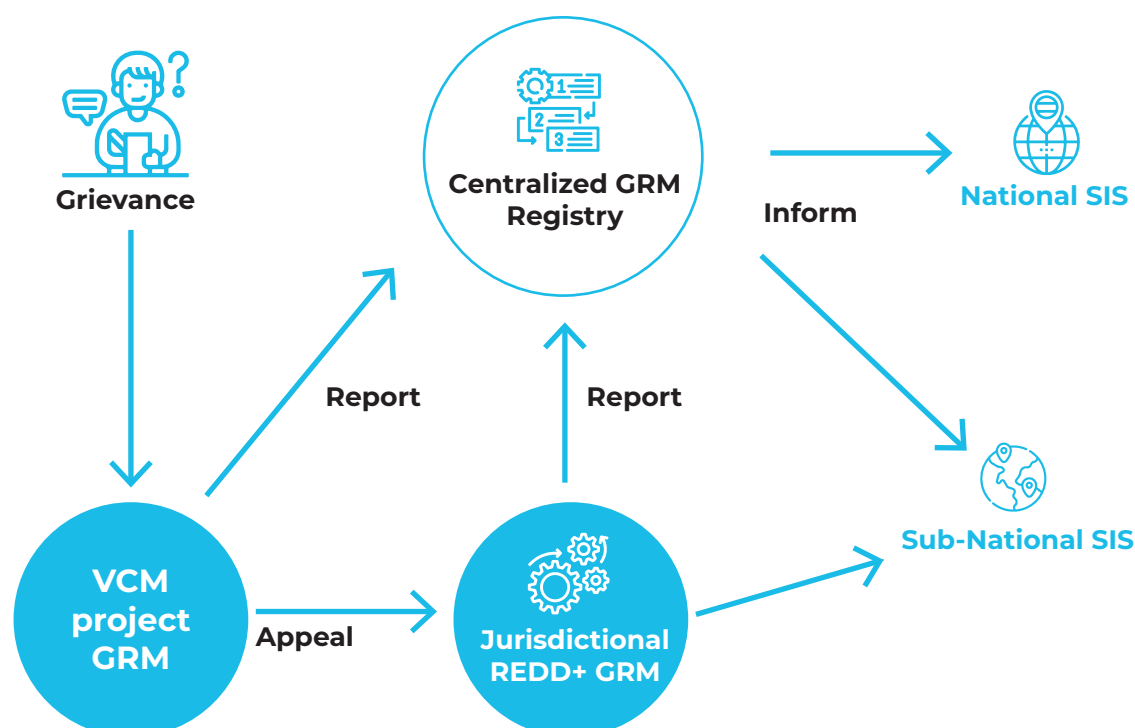
While often national/subnational REDD+ programmes and carbon issuance standards have requirements for GRM, they often operate in isolation from one another. Harmonizing or integrating GRM across different scales of REDD+ implementation could help standardize

requirements and procedures to permit jurisdiction to have an oversight role of REDD+-related conflicts at the different scales. It could also help to create a centralized GRM registry that could report to subnational and national SIS (see Figure 6). This could help to capture trends, identify and address smaller issues before they affect rights, and livelihoods and have other serious impacts, and contribute to national-level safeguards reporting.

Establishing an integrated GRM may require implementing protocols to ensure harmonization across different scales, such as by:

- Ensuring multiple access channels to the GRM, such as through in-person/oral or other access options;
- Using a unified data capture format and periodically reporting the cases received and the status of resolution in a standardized format;

Figure 6: Potential flow of information for integrated grievance redress mechanisms



- Offering the possibility of appealing to a higher-level GRM (sub-national or national), connecting the local to other levels;
- Establishing unified requirements across all levels of GRM to facilitate access for IPs and LCs, to address claims related to gender-based violence and other potential issues.

In this way, an integrated GRM would provide a minimum framework for REDD+ GRMs across multiple scales. This would allow for a minimum standard of quality and dialogue between different GRMs through unified operating principles and tools (report formats, registries, etc.). This would help to strengthen safeguards reporting and overall environmental and social management of REDD+ across different scales, which would be of relevance in the context of nesting.

3.3.4 Framework benefits-sharing mechanisms

Benefits-sharing mechanisms are procedures or systems, with principles, rules and roles, to allocate monetary and non-monetary incentives from results-based and carbon finance from programmes and projects.

In a nested REDD+ system where emissions reductions are generated by projects as well as at the jurisdictional scale, different benefits-sharing systems for REDD+ may coexist. Harmonization or integration of benefits-sharing approaches for REDD+ can entail establishing guidelines, requirements and other elements from the jurisdiction scale, which can be considered in the development of nesting approaches. This could be a challenging process due to the need to create clear accounting for both the emissions reductions and the benefits associated with them.

For example, in countries with crediting at the national scale, nesting may carry risks related to perceived unfair distribution of benefits to projects. In such cases, if governments are responsible for receiving and allocating REDD+ benefits, projects and/or stakeholders participating in the generation of the emissions reductions (i.e. IP and LC) may not receive their fair share of benefits from mitigation actions if the overall jurisdiction fails to achieve sufficient ERs. This situation can entrench or worsen existing inequalities rather than improve livelihoods, and potentially lead to legal action from affected parties to protect their rights and interests, as well as reduced investments in site-specific conservation measures. It is, therefore, necessary to consider both carbon accounting as well as governance and safeguards aspects when developing benefits-sharing mechanisms.

A framework benefits-sharing mechanism for nested REDD+ could help ensure that certain rights, and processes are in place across scales of REDD+ implementation. This framework system could include:

- Identifying the beneficiaries;
- Considering special modalities to ensure access for IPs and LCs, women, small and/or informal farmers or other disadvantaged beneficiaries;
- Aligning the systems with carbon rights and other regulations, as applicable;
- Allowing sufficient flexibility for adaptation to different scales and modalities of REDD+ activities, while reducing transaction costs, as possible;
- Establishing principles and criteria for benefits allocation, balancing the need to finance national policies with providing sufficient and fair incentives at the local-level.

This framework benefits-sharing mechanism would provide a structured approach to allocate monetary and non-monetary incentives from REDD+, ensuring they are fair, efficient, and adaptable to various contexts and needs within REDD+ initiatives.

Sharing the benefits received through REDD+ implementation is a key component of a nesting approach, and land tenure rights and IP and LC rights may be included in the design and implementation of BSM.⁴⁴ The application of free, prior and informed consent, as appropriate, can be particularly important to ensure benefit-sharing mechanism reflect the rights and priorities of Indigenous Peoples, as well as other relevant stakeholders.

3.3.5 Tools for safeguards implementation

In addition to safeguards reporting, grievance redress, and benefits sharing, continuous oversight of REDD+ activities in the country can contribute towards effective environmental and social risk management. This can benefit from a number of safeguards implementation tools, which will be specific to each country's needs and contexts. These can include:

- Guidance on participation and FPIC;
- Capacity-building tools for IPs, LCs, and women's organizations, with a focus on the

management of resources, and roles beyond just that of beneficiaries for forest and climate finance;

- Guidance on developing gender assessments and developing a gender approach for REDD+;
- Mapping multiple benefits of REDD+ beyond carbon, including biodiversity, hydrological services, and other ecosystem services, in line with opportunities to achieve high-integrity REDD+ implementation and potentially access diversified and scaled-up funding;
- Environmental and social risk and screening tools, management plans;
- Indigenous Peoples and cultural heritage plans.

Developing elements of an integrated safeguards approach, which can support overall approaches for nesting, can be done through a stepwise approach, and gradual improvements. This progressive approach can build upon existing safeguards management tools already in place.



LEARNING TOOL

Review what you have just learned. Go to the [REDD+ Academy Platform](#) to consolidate your knowledge on safeguards in the context of REDD+ nesting.





Key Takeaways

- Carbon accounting, governance and safeguards considerations are all key in developing a nesting approach. There is a strong need for a transparent approach, robust governance, and stakeholder engagement, including with Indigenous Peoples and local communities, with a gender approach, as illustrated by examples from various countries.
- For successful REDD+ nesting approaches, clear institutional roles, effective multi-scale coordination, and inclusive stakeholder engagement are crucial. Robust frameworks that integrate national and local actions, support capacity building, and ensure transparent safeguards, are essential for effective implementation.
- Integrated safeguards approaches, with safeguards reporting and tools, grievance redress mechanisms, and benefits-sharing frameworks, across different scales can help to ensure fairness and transparency. Additionally, effective safeguards and tools are essential for robust oversight and protection in REDD+ initiatives.
- Integrating grievance redress mechanisms and benefits-sharing frameworks across different scales in REDD+ systems ensures fairness and transparency. Additionally, effective safeguards and tools are essential for robust oversight and protection in REDD+ initiatives.

Module 4



Conclusions



The conclusions

- This section reviews essential considerations for a REDD+ nesting process, highlighting how the integration of carbon accounting, governance and safeguards aspects can strengthen the credibility and impact of REDD+ initiatives.
- It shares reflections on how REDD+ nesting approaches can help to unlock new and scaled up opportunities for forest carbon finance, advance sustainable development goals, and contribute to climate change mitigation.



The scope of forest carbon finance is broadening, providing countries with diverse options to engage in REDD+. Jurisdictions face decisions about whether to engage with stand-alone projects, pursue jurisdictional (subnational) or national-scale financing, or a combination. Integrating these diverse scales through aligned carbon accounting has become increasingly important to ensure the overall integrity of REDD+ and help to access and scale up further forest carbon finance opportunities and achieve NDC commitments in the forestry sector. This Learning Journal provides a Nesting Decision Tree to help guide decision-making and approaches to nesting.



Developing a REDD+ nesting approach involves strategic considerations, policy formulation, and institutional capacity. In developing a REDD+ nesting approach, governments face a range of considerations, rooted in defining whether it is necessary to nest or not – and if not, if it might be needed in the future, as well as the system's objectives and scope. Creating such a system is a challenging task, requiring strategic decision-making, policy formulation, and institutional development. This may involve capacity building, addressing legal and carbon rights complexities, multi-scale institutional strengthening, enhanced environmental and social management, and allocation of additional resources to run the system effectively.



A decision to nest or not to nest, and the approach developed, will depend on a country's unique circumstances and priorities. Nesting approaches vary widely; there is no one-size-fits-all solution. A nesting approach can be developed in a stepwise manner, depending on priorities, resources and capacities. There is important progress being made across regions. Countries such as Peru, Kenya, Guatemala and Cambodia, are already strengthening their national policies to tackle deforestation by integrating multi-scale REDD+ initiatives and nesting approaches into their national priorities and planning.



REFLECTION POINT

What opportunities can be presented by developing a nesting approach?



LEARNING TOOL

Review what you have just learned. Go to the [REDD+ Academy Platform](#) and watch the video with crucial considerations and takeaways for developing and implementing nesting approaches.





Nesting approaches can help to ensure integrity by aligning carbon accounting across scales. This may be through the unification of accounting processes and the creation of national registries. Such systems could help enable the registration and transfer of carbon credits, subject to requirements including the use of jurisdictional FRELs. This can help to ensure that national-level reductions accurately reflect the cumulative impact of all emissions reduction initiatives within the country.



Nesting also provides opportunities to align and enhance key aspects related to governance.

There are opportunities to improve regulations related to governance for nesting to better secure carbon rights. Developing, adjusting, or clarifying clear guidelines and procedures for the allocation, recognition and transfer of carbon rights can help ensure environmental integrity and equitable benefit-sharing. Standardized protocols and guidelines for data collection and reporting can also help to ensure consistency.



Integrated reporting on safeguards through a nesting approach can help to improve risk management and reporting of REDD+ impacts.

An integrated safeguards system could help to guarantee the consistent application of environmental and social safeguards across the entire country, establishing cohesive and standardized protocols for managing environmental and social risks. Additionally, it could facilitate the reporting of safeguards information and assess the tangible impacts on both people and the environment stemming from various REDD+ initiatives being implemented, including carbon projects.



Your learning journey is concluded: What do you know now about nesting in REDD+? Go to the [REDD+ Academy Platform](#) and answer the questions to assess your actual knowledge.



**LEARNING
TOOL**

Annex 1: Governance challenges related to nesting and potential solutions, across multiple scales

Scale	Challenges	Potential solutions
National	<p>Lack of a clear country-tailored decision-making process and operational architecture for REDD+ nesting.</p> <p>Complexity of institutional arrangements, and consideration of political economy.</p> <p>Difficulty in defining key technical issues and decisions related to a country-specific nesting approach and link with climate and forest policies.</p> <p>Need to present transparent information about REDD+ initiatives across scales, and track their emission reductions.</p>	<p>Establish a well-discussed, robust and adaptable nesting governance approach that considers interests and circumstances across levels.</p> <p>Establish legal reforms, multi-scale institutional arrangements, and coordination to focus on integrity.</p> <p>Ensure a cohesive approach across all stakeholders (dialogues, consultation, co-design, etc.).</p> <p>Develop a national registry or encourage the utilization of alternative existing information sources that will allow stakeholders and actors tracking of ERs.</p>
Subnational	<p>Lack of specific information and empirical evidence on REDD+ governance aspects related to nesting, hindering the design and implementation process.</p> <p>Country-specific factors and context, including local government specifications or legal limitations on land tenure and use rights (mismatch with national policies and regulations).</p> <p>Lack of necessary national and subnational institutional arrangements to operate a nesting approach.</p>	<p>Analyze ongoing, planned, and potential REDD+ projects and jurisdictional initiatives with regard to (estimated) emission reductions, as the basis for developing coherent accounting and reporting processes across levels.</p> <p>Strengthen procedures and capacities for risk management and safeguards, as well as reception and management of grievances and claims related to REDD+ nesting.</p> <p>Implement capacity-building processes around REDD+ and carbon markets to address potential conflicts and design spaces for dialogue and capacity building.</p>

Scale	Challenges	Potential solutions
Project	<p>Data and methodological mismatches between project-level REDD+ initiatives and the nesting approach.</p> <p>Avoidance of double counting of ERs across different scales could require analysis and/or revision of methodologies and baselines by project developers/proponents as well as a subsequent deviation and adjustment of methodologies with the standard-setting body.</p> <p>Analyse the implications of a nesting approach's conditions (e.g. baseline adjustments) and requirements (e.g. on reporting) on the commercial viability of future stand-alone projects balance of private versus public lands, and roles and capacities of decision-making authorities.</p> <p>Maintaining project viability and business models for existing REDD+ initiatives when adjusting to a nested system, as reductions in carbon credits or revenue could lead to project abandonment.</p>	<p>Based on technical analysis and discussions with the developers, find the best methodological approach that can be used at multiple scales.</p> <p>Establish clear legal/regulatory frameworks for project that enable nesting and define the conditions under which a nesting approach could be appropriated at the project-scale.</p> <p>Clarify the technical and administrative requirements expressed by national government for REDD+ projects and engage in discussions to secure adequate flow of funds and capacity-building (as appropriate) to the project-scale.</p> <p>Implement gradual transition periods during the nesting process to allow projects to adapt their business models, while offering flexible benefit-sharing approaches that ensure fair distribution, provide technical support throughout the nesting process and consider case-by-case transitional incentives or compensation schemes for projects facing significant adjustments.</p>

References

- 1 Streck C, Lee DL, Cano J, Fernandez M, Llopis P., Landholm D., Reddy RC., Espejo AB. *Nesting of REDD+ Initiatives: Manual for Policymakers*. (Washington D.C., World Bank Group, 2021).
- 2 Verra. *Jurisdictional and Nested REDD+ Framework*. Available from: <https://verra.org/programs/jurisdictional-nested-redd-framework/> [Accessed 14/11/2024].
- 3 Architecture for REDD+ Transactions [ART]. *Nesting Under ART*. 2021. Available from: <https://www.artredd.org/wp-content/uploads/2021/12/Nesting-under-ART-final-July-2021.pdf> [Accessed 14/11/2024].
- 4 Climate Focus, "The Voluntary Carbon Market Explained (VCM Primer)", December 2021.
- 5 United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on its thirteenth session*. Bali, Indonesia. 14 March 2008.
- 6 United Nations Framework Convention on Climate Change, *The Cancun Agreements*. Cancun, Mexico. Dec. 11 2010.
- 7 United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on its nineteenth session*. Warsaw, Poland. 2013.
- 8 United Nations Framework Convention on Climate Change, *Nationally determined contributions under the Paris Agreement. Synthesis report by the secretariat*. Sharm el-Sheikh Climate Change Conference, 12 December 2022 (FCCC/PA/CMA/2022/4/Corr.1).
- 9 United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its fifth session, held in the United Arab Emirates from 30 November to 13 December 2023*. (FCCC/PA/CMA/2023/16/Add.1).
- 10 United Nations Framework Convention on Climate Change, *The Paris Agreement*. Paris, France. 12 December 2015.
- 11 Verra, "Jurisdictional and Nested REDD+: JNR Program Guide v4.1", 19 August 2024.
- 12 Architecture for REDD+ Transactions [ART], "Attracting New Investment to Protect and Restore Forests", Available from: <https://www.artredd.org/> [Accessed: 14/11/2024].
- 13 West TA, Börner J, Sills EO, Kontoleon A. Overstated carbon emission reductions from voluntary REDD+ projects in the Brazilian Amazon. *Proceedings of the National Academy of Sciences*. 2020; 117(39): 24188-94.
- 14 Patrick Greenfield, "Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows" *The Guardian*, 18 January 2023.
- 15 West TA, Wunder S, Sills EO, Börner J, Rifai SW, Neidermeier AN, Frey GP, Kontoleon A. Action needed to make carbon offsets from forest conservation work for climate change mitigation *Science*. 2023;381(6660):873-7.
- 16 Patrick Greenfield, "Nowhere else to go': forest communities of Alto Mayo, Peru, at centre of offsetting row", *The Guardian*, 18 January 2023.
- 17 Andrés Bermúdez Liévano, "Colombia's constitutional court to examine carbon credits dispute for the first time", *Pulitzer Center*, 18 May 2023.
- 18 Alusiola RA, Schilling J and Klär P. REDD+ conflict: Understanding the pathways between forest projects and social conflict. *Forests*. 2021;12(6): 748.
- 19 Milne S. and Mahanty S. Value and bureaucratic violence in the green economy. *Geoforum*. 2019; 98:133-43.

- 20 Olivia Rumble & Andrew Gilder, "Zimbabwe to Seeking to Take Over its Carbon Credit Market" *African Climate Wire*, 18 May 2023.
- 21 Guizar-Coutiño A., Jones JP., Balmford A., Carmenta R., Coomes DA. A global evaluation of the effectiveness of voluntary REDD+ projects at reducing deforestation and degradation in the moist tropics *Conservation Biology*. 2022; 36(6): e13970.
- 22 The Integrity Council for the Voluntary Carbon Market [IC-VCM], "The Core Carbon Principles". 6 February 2024.
- 23 Voluntary Carbon Markets Integrity Initiative [VCMI]. Available from: <https://vcmintegrity.org> [Accessed: 14/11/2024].
- 24 Science Based Targets Initiative [SBTi]. "Scope 3: Stepping up science-based action." 20 February 2023. Available from: <https://sciencebasedtarget-gets.org/blog/scope-3-stepping-up-science-based-action> [Accessed 14/11/2024].
- 25 United Nations Environment Programme. Making good on the Glasgow Climate Pact: a call to action to achieve one gigaton of emissions reductions from forests by 2025. (Nairobi, 2022).
- 26 Science Based Target Initiatives [SBTi], "Above and Beyond: An SBTi Report on the Design and Implementation of Beyond Value Chain Mitigation (BVCM) Version 1.0", February 2024.
- 27 World Resources Institute [WRI], "Guidance on Voluntary Use of Nature-based Solution Carbon Credits Through 2040" 2 June 2022.
- 28 Tropical Forest Credit Integrity [TCFI] Guide, "Tropical Forest Credit Integrity Guide for Companies Version 2", February 2023.
- 29 Morita K., Matsumoto KI., Challenges and lessons learned for REDD+ finance and its governance. *Carbon Balance and Management*. 2023; 18(1): 8.
- 30 The Nature Conservancy, "Nesting REDD+: Pathways to Bridge Project and Jurisdictional Programs", March 2021. Available from: https://www.nature.org/content/dam/tnc/nature/en/documents/REDDPlus_PathwaystoBridgeProjectandJurisdictionalPrograms.pdf [Accessed: 15/11/2024].
- 31 Duchelle AE., Seymour F., Brockhaus M., Angelsen A., Larson AM., Moeliono M., Wong GY., Pham TT., Martius C. "REDD+: Lessons from National and Subnational Implementation", (Washington D.C., World Resources Institute, 2018).
- 32 Architecture for REDD+ Transactions [ART]. "Ghana TREES Monitoring Report (2017-2021)." 8th January 2024 Available from: <https://art.apx.com/mymodule/reg/TabDocuments.asp?r=111&ad=Prpt&act=update&type=PRO&aProj=pub&tablename=doc&id1=106> [Accessed: 15/11/2024].
- 33 Forest Carbon Partnership Facility [FCPF], "Benefit sharing plan: Mai-Ndombe Emissions Reductions Program Democratic Republic of the Congo" May 2022.
- 34 VCS CCB Standards, "Verification Report of The Mai Ndombe REDD+ project: v3.1", VCS. VER.22.78, 15 February 2024. Available from: <https://registry.terra.org/app/projectDetail/VCS/934> [Accessed: 18/11/2024].
- 35 Intergovernmental Panel on Climate Change [IPCC], "Good Practice Guidance for Land Use, Land-Use Change and Forestry". 2003.
- 36 Verra, "Verra Advances Jurisdictional Deforestation Risk Mapping", 11 April 2024.
- 37 Forest Carbon Partnership Facility [FCPF], "Anexo XI: Approach and Principles of Nesting for REDD+ Initiatives (Projects and Programs) in Guatemala", September 2019.
- 38 Centre for International Forestry Research [CIFOR], "Infobrief: Peru's regulatory framework for carbon markets: Current legal and policy developments in the context of REDD+". December 2022.

- 39 Peru, Ministerio del Ambiente [MINAM], Strategic Elements of REDD+ Implementation in Peru. November 2014.
- 40 Ansell C and Torfing J. Handbook on Theories of Governance . Edward Elgar Publishing; 2016 P1-18. Available from: <https://doi.org/10.4337/9781782548508.00008>.
- 41 Hyden G, Court J and Mease K. *Making Sense of Governance: Empirical Evidence from Sixteen Developing Countries*. Lynne Rienner Publishers; 2004. <https://doi.org/10.1515/9781626373839>.
- 42 Pinsky V, and Kruglianskas I. Governing REDD+: a state of the art review. *Revista de Administração da UFSM*. 2019; 12(1): 182. Available from: <https://doi.org/10.5902/1983465936131>.
- 43 Gillenwater M. and Seres S. The Clean Development Mechanism: a review of the first international offset program. *Greenhouse Gas Measurement and Management*. 2011; 1(3-4): 179-203. Available from: <https://doi.org/10.1080/20430779.2011.647014>.
- 44 Schneider L, Kollmuss A and Lazarus M. Addressing the risk of double counting emission reductions under the UNFCCC. *Climatic Change*. 2015; 131(4), 473-486.
- 45 Sunderlin WD, Ekaputri AD, Sills EO, Duchelle AE, Kweka D, Diprose R, et al. "The challenge of establishing REDD+ on the ground: Insights from 23 subnational initiatives in six countries" Occasional Paper 104. (Bogor, Indonesia; Center for International Forestry Research [CIFOR]; 2014).
- 46 Jagger P, Brockhaus M, Duchelle AE, Gebara MF, Lawlor K, Resosudarmo IAP, et al. Multi-Level Policy Dialogues, Processes, and Actions: Challenges and Opportunities for National REDD+ Safeguards Measurement, Reporting, and Verification (MRV). *Forests*, 2014; 5(9), 2136-2162. Available from: <https://doi.org/10.3390/f5092136>.
- 47 Ravikumar A, Larson A, Duchelle A, Myers R and Gonzales Tovar J. Multilevel governance challenges in transitioning towards a national approach for REDD+: Evidence from 23 subnational REDD+ initiatives. *International Journal of the Commons*. 2015; 9(2): 909-931. Available from: <https://doi.org/10.18352/ijc.593>.
- 48 Republic of Kenya, Ministry of Environment and Forestry, *National REDD+ Strategy*, December 2021.
- 49 Conservation International, "Lessons Learned from REDD+ Nesting Approaches and Recommendations to Kenya", 2 August 2021.
- 50 Kashwan P and Holahan R. Nested Governance for Effective REDD+: Institutional and Political Arguments. *International Journal of the Commons*. 2014; 8(2), 5 54-75.
- 51 Kingdom of Cambodia. *National REDD+ Strategy 2017-2026*. 2017.
- 52 Kingdom of Cambodia. *Cambodia REDD+ Programme: Nesting Report*. 2022.
- 53 UN-REDD Programme, "Info brief: Safeguarding People and Nature in REDD+: Meeting the Safeguards Requirements under the United Nations Framework Convention on Climate Change", 17 March 2022.
- 54 UN-REDD Programme, "Safeguards: towards new horizons in REDD+ environmental and social management", 11 April 2024.
- 55 Peru, Ministerio del Ambiente [MINAM], Estrategia Nacional ante el Cambio Climático (Supreme Decree no.007-2016-MINAM).
- 56 UN-REDD Programme, "Marco hondureño de salvaguardas para proyectos de cambio climático", 11 May 2022.



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