CONSERVATION INTERNATIONAL

Understanding REDD+, Nature-based Solutions & Carbon Markets

A Comprehensive Training Toolkit

ACKNOWLEDGMENT

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Every effort has been made to verify the accuracy of the information contained in this toolkit. All information was believed to be correct as of January 2024. However, CI recognizes some areas that information may have changed in accordance with developments in the global, regional, and national contexts. Conservation International will endeavor to update the toolkit on a regular basis as appropriate to keep up with emerging trends and information.

LIST OF ACRONYMS

ACR	American Carbon Registry
ADCs	Avoided Deforestation Credits
ARR	Afforestation, Reafforestation, Revegetation
ART/TREES	Architecture for REDD+ Transactions, The REDD+ Environmental Excellence Standard
CA	Corresponding Adjustment
CAR	Climate Action Reserve
CAS	Country Approach to Safeguards
CBD	Convention on Biological Diversity
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CIEL	Centre for International Environmental Law
CIFOR	Centre for international Forestry Research
CI	Conservation International
CCP	Core Carbon Principles
CDM	Clean Development Mechanism
COP	Conference of Parties
EAs	Environmental Audits
EES	Energy Efficiency Standards
EIA	Environmental Impact Assessment
ERs	Emission Reductions
ERRs	Emission Reductions and Removals
ESS	Environmental Social Standards
ETF	Enhanced Transparency Framework
ETS	Emissions Trading Schemes
EU ETS	European Union Emissions Trading System
FAO	Food Agriculture Organization
FCPF	Forest Carbon Partnership Facility
FPIC	Free Prior Informed Consent
FREL	Forest Reference Emission Level
FRL	Forest Reference Level
GCF	Green Climate Fund
GESI	Gender and Social Inclusion
GHGs	Green House Gases
GRM	Grievance and Redress Mechanism
GS	Gold Standard
ICAO	International Civil Aviation Organization
IFC	International Finance Cooperation
IFM	Improved Forests Management
ILO	International Labor Organization

LIST OF ACRONYMS

IPs	Indigenous Peoples
IPCC	Intergovernmental Panel on Climate Change
IPLCs	Indigenous Peoples and Local Communities
ITMOs	Internationally Transferred Mitigation Outcomes
IUCN	International Union for Conservation of Nation
LULUCF	Land Use, Land Use Change and Forestry
MRV	Measurement Reporting and Verification
NbS	Nature-based Solutions
NDCs	Nationally Determined Contributions
NFMS	National Forest Monitoring System
NGOs	Non-governmental Organizations
PA	Paris Agreement
PAMs	Policies and Measures
RBF	Result-based Finance
RBP	Result-based Payment
RECS	Renewable Energy Certificates
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RGGI	Regional Greenhouse Gas Initiative
RRF	REDD+ Readiness Fund
SDGs	Sustainable Development Goals
SESA	Strategic Environmental and Social Assessment
SIS	Safeguards Information System
UNDRIP	United Nations Declaration on the Rights of Indigenous People
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNGPs	United Nations Guiding Principles
UNRISD	United Nations Research Institute for Social Development
USAID	United States Agency for International Development
USD	United States Dollar
VCM	Voluntary Carbon Markets
VCS	Voluntary Carbon Standard
WFR	Warsaw Framework for REDD+
WIM	Warsaw International Mechanism
WWF	World Wildlife Fund

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Module 1: Introduction to Climate Change & REDD+

1. Module Overview

This module introduces you to what climate change is, the relationship between climate change and REDD+ and the components of REDD+. Further this module shall establish the basics of REDD+ and how climate change impacts forests which are vital in successful REDD+ implementation.

Further, the module is divided into four sections namely climate change, the role of forests in REDD+, what REDD+ is and its background and lastly REDD+ components. A case study, video lesson and quiz has been provided to enhance understanding of various concepts within the module.

Learning Objectives and Outcomes

Learning Objectives

- **Objective 1:** Understand the concept of REDD+ and its role in climate change mitigation
- **Objective 2:** Identify the different components of REDD+ and their interrelationships
- **Objective 3:** Explain the role of forests in REDD+ implementation

Learning Outcomes

1. Be able to discuss the potential of REDD+ to reduce greenhouse gas emissions from forests
2. Be able to identify the key stakeholders involved in REDD+ implementation
3. Be able to assess the role of forests in REDD+ projects in different contexts

Lesson Outline

Lesson 1.1:	What is Climate Change
Lesson 1.2:	Role of Forests in REDD+
Lesson 1.3:	What is REDD+ and Background
Quiz	Module Assessment

1.1 What is Climate Change

Climate change is a change in the average temperature and cycles of weather over a long period of time normally given in periods of 30 years and above**. Weather** is the state of the atmosphere at any given time and place. While the weather can change in minutes or hours, a change in climate is something that develops over longer periods of decades to centuries. Therefore, climate change is the long-term average of the weather in a given place. Familiar aspects of weather include **temperature, rainfall**, **clouds**, and **wind** that people experience throughout the day.[1] The Intergovernmental Panel on Climate Change (IPCC) 6th Assessment report highlights scientifically that climate change is solely caused by human activities. This report highlights that human-caused climate change is already having a significant impact on the Earth.[2] It also projects that the impacts of climate change are expected to become more severe in the future unless greenhouse gas emissions are reduced significantly as indicated in **Figure 1.1**. Also, limiting global warming to 1.5 degrees Celsius will require rapid and far-reaching changes to energy systems, land use, and industrial processes. Additionally, even if global warming is limited to 1.5 degrees Celsius, there will still be significant impacts on Earth, including more extreme weather events, rising sea levels, and changes in agricultural yields. The IPCC 2021 report is a call to action for governments, businesses, and individuals to take urgent steps to reduce greenhouse gas emissions and mitigate the impacts of climate change.

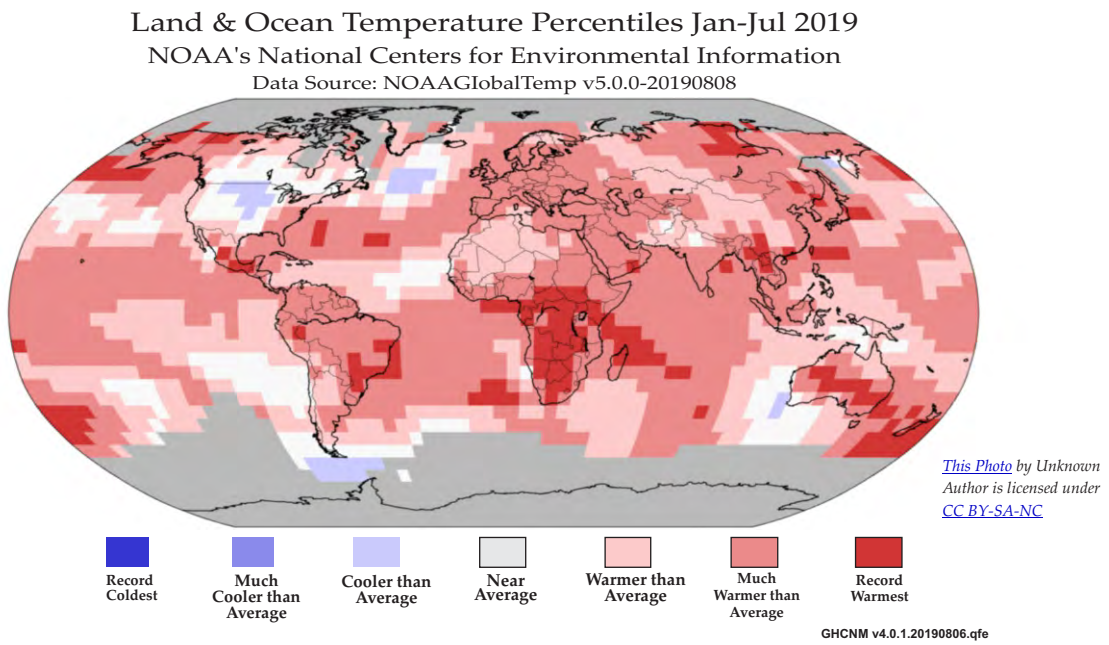


Figure 1.1: Global Temperature in 2019

[1] https://climate.peopleinneed.net/climate-change
[2] https://www.ipcc.ch/assessment-report/ar6/

Climate affects human well-being, societies, ecosystems (landscapes: grasslands, Forests, Savanah, scrubland, wetlands, etc.), and livelihood activities and practices (agriculture, etc.).

The views of climate and weather are often confusing to many people, therefore it is helpful to think about the difference between weather and climate: Weather influences what clothes you wear on a given day, while the climate where you live influences the entire clothing line you buy over time.

As earlier highlighted, climate change is caused by human-induced activities including the burning of fossil fuels, such as coal, oil, and natural gas which release greenhouse gases into the atmosphere. Greenhouse gases trap heat from the sun, which causes es in agricultural yields, and loss of biodiversity. The Earth's temperature to rise as illustrated in **Figure 1.2.** Other human activities that contribute to climate change include deforestation, agriculture, and industrial processes. Deforestation releases carbon dioxide into the atmosphere as trees are cut down and burned. Agriculture releases methane and nitrous oxide into the atmosphere, which are also greenhouse gases that include water vapour (H2O), carbon dioxide (CO2), nitrous oxide(N2O), methane (CH4), and ozone (O3).

Industrial processes release a variety of greenhouse gases into the atmosphere. Worth noting is that impacts of climate change are already being felt around the world and include more extreme weather events, such as heat waves, droughts, floods, and wildfires; rising sea levels; change.

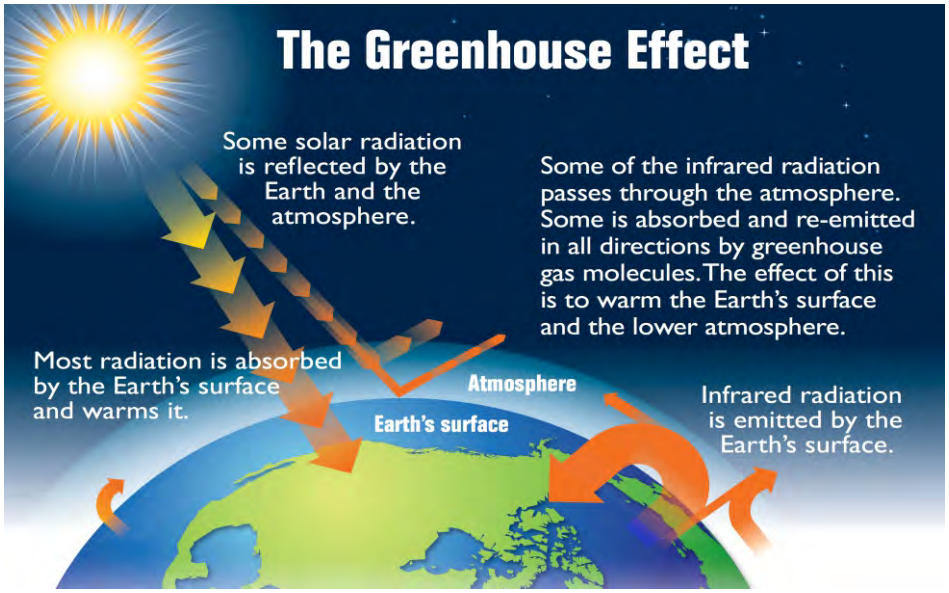


Figure 1.2: Greenhouse Effect on Climate Change

"The climate crisis is not about politics. It's about survival."
- Greta Thunberg

This video link illustrates what climate change is and its impacts and further explains how greenhouse effects contribute to climate change:
https://www.youtube.com/embed/EuwMB1Dal-4?feature=oembed

1.1 Exercise 1

1. What is climate change?
2. Do human activities cause climate change?
3. What is the greenhouse effect?
4. Does the greenhouse effect contribute to climate change?

1.2 Roles of Forest- Global Perspective

According to the World Resources Institute's Global Forest Review, there were 4.06 billion hectares of forests in the world in 2020, which is about 31% of the global land area. This is a decrease of about 1% from 2010[3]. Also, the world experienced 130.9 million hectares (Mha) of tree cover loss between 2000 and 2020 which is estimated to be roughly the size of Peru. The vast majority of tree cover loss (59%) occurred in temperate and boreal forests, while the remaining 41% occurred in tropical and subtropical forests[4].

· Tropical and subtropical forests:

These forests cover about 1.6 billion hectares, or 40% of the world's forest area, and are found in Central and South America, Africa, and Southeast Asia.

· Temperate and boreal forests:

These forests cover about 2.1 billion hectares, or 52% of the world's forest area, and are found in North America, Europe, and Asia.

· Mountain forests:

These forests cover about 300 million hectares, or 7% of the world's forest area, and are found in all regions of the world.

[3]https://www.fao.org/forest-resources-assessment/2020/en/
[4]United Nations Department of Economic and Social Affairs, United Nations Forum on Forests Secretariat (2021). The Global Forest Goals Report 2021

Forests play a vital role in the global ecosystem. They provide a home for millions of species of plants and animals, they help to regulate the climate, they filter water, and they provide a source of food and medicine.

1.2.1 Role of Forests in the Carbon Cycle

The carbon cycle is a biogeochemical cycle by which carbon is exchanged among the biosphere, pedosphere, geosphere, hydrosphere, and atmosphere. The carbon cycle is driven by the carbon dioxide concentration in the atmosphere, which is regulated by photosynthesis and respiration.

Four steps of the carbon cycle include:

- Carbon dioxide enters the atmosphere through a variety of processes, including respiration, decomposition, and the burning of fossil fuels.
- Secondly, carbon dioxide is absorbed by plants to make food through photosynthesis.
- Thirdly, carbon is incorporated into animals when they eat plants and then released back into the atmosphere when they breathe or die.
- Fourthly, carbon is stored in rocks and sediments when dead plants and animals are buried and eventually forms fossil fuels as illustrated in **Figure 1.3**[5].

Forests can also be carbon dioxide emissions sources when they release more carbon than they absorb, for instance during a forest fire or when they are destroyed through human activities such as deforestation for agriculture or fuel wood[6]. The carbon cycle illustrated below in **Figure 1.3**. Well-conserved Forest resources, therefore, act as carbon sinks. A growing forest is considered a [7]carbon sink if it absorbs more carbon from the atmosphere than it releases which shows the importance of forests in the carbon cycle illustrated below in **Figure 1.3**.

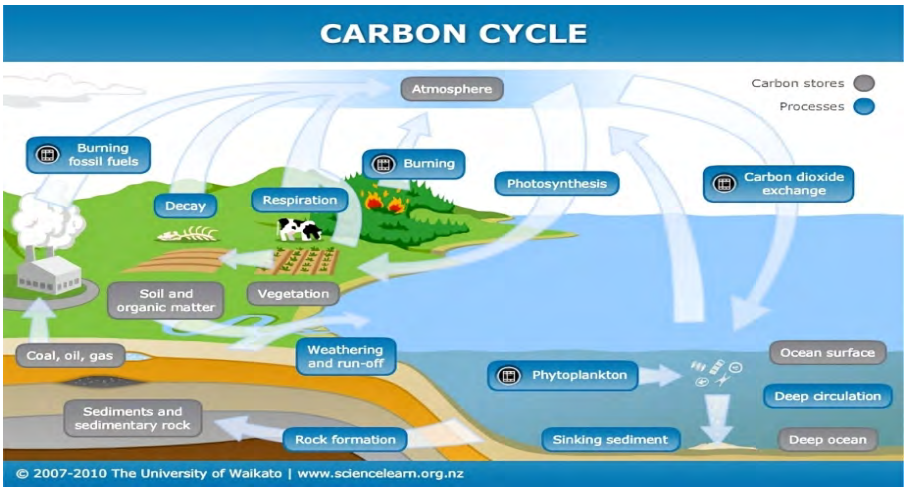


Figure 1.3: The Carbon Cycle and its Role in Carbon Sinks

[5] en.wikipedia.org/wiki/Carbon_cycle
[6] FAO, 2018: REDD+
[7] https://natural-resources.canada.ca/climate-change-adapting-impacts-and-reducing-emissions/climate-change-impacts-forests/forest-carbon/13085

Carbon sink becomes carbon storage when the carbon sequestered through the trees and soil is not released into the atmosphere. Therefore, forests serve both as carbon sinks and storage as they grow. Forests have [8]moderated climate change by absorbing about one-quarter of the carbon emitted by human activities such as the burning of fossil fuels and the changing of land uses.

Carbon uptake by forests reduces the rate at which carbon accumulates in the atmosphere and thus reduces the rate at which climate change occurs. Also, forests established by [9]reforestation (planting trees on formerly forested land) and afforestation (planting trees where they historically did not exist) can enhance the terrestrial carbon sink, thereby slowing the accumulation of CO2 in the atmosphere as indicated in **Figure 1.3.**
It is therefore important to keep forest carbon sinks healthy and safe so that they can absorb excess carbon dioxide emissions from the atmosphere which is causing global warming and subsequently climate change.

Therefore, the reason why global efforts are leaning towards forest conservation and mitigating climate change is because[10] growing forests captures carbon dioxide emissions in their biomass and soils, and large-scale tree planting enhances the role of forests as carbon sinks which we will learn on Nature-based solutions in **Module 9.** This is considered one of the best strategies to counteract anthropogenic emissions as part of net-zero emission strategies.

1.2.2 What is Deforestation and Forest Degradation[11]

Box 1.1: Definitions

· **Deforestation**:
Deforestation is the clearing of forests for human use, such as agriculture and infrastructure development. It is the leading cause of forest loss.

· **Forest degradation**:
Forest degradation is the loss of forest quality, such as through the loss of tree cover or the fragmentation of forests. It is a major threat to forest ecosystems and biodiversity.

· **Climate change**:
Climate change is causing changes in precipitation patterns, temperatures, and extreme weather events, which are all impacting forests.

[8]https://natural-resources.canada.ca/climate-change-adapting-impacts-and-reducing-emissions/climate-change-impacts-forests/forest-carbon/13085
[9]https://www.frontiersin.org/articles/10.3389/ffgc.2020.00058/full
[10]https://www.frontiersin.org/articles/10.3389/ffgc.2020.00058/full
[11]definitions based on The National Forest Reference Level for REDD+ 2019.
https://redd.unfccc.int/files/national_frl_report_for_redd__in_kenya.pdf

Direct Drivers also called *proximate drivers* are mainly human activities or immediate actions that directly impact forest cover and loss of carbon stocks. They mainly include;

- ✓ Deforestation drivers, mainly large-scale processes such as Infrastructure development, commercial agriculture, mining, and urban expansion.
- ✓ Forest degradation drivers, mostly small-scale processes like subsistence agriculture.

Indirect drivers (or *underlying drivers*) are mainly due to social, economic, political, cultural, and technological processes that give rise to the direct drivers. Examples of indirect drivers include population growth, migration, weak governance and enforcement, individual and household behavior, etc.

Weak enforcement of forest governance has been a key driver of deforestation, characterized by encroachment in forest lands and illegal logging activities.

1.2.3 Why address Deforestation and Forest Degradation?

Forest resources are normally subjected to pressure by other socio-economic activities leading to forest degradation and deforestation. This in turn leads to increased emissions from the forest sector, if not well managed.

[12]Deforestation and forest degradation are recognized as the second leading contributor of GHGs that cause global warming and is responsible for about 11% of global carbon dioxide emissions as discussed in the previous lesson above.

In addition to their carbon storage role, forests play other valuable roles that include: water regulation, soil protection, non-timber forest products including food and fibre, climate regulation, and biodiversity conservation. These challenges can be categorized as direct drivers of deforestation and forest degradation and indirect drivers.
Stopping deforestation has numerous benefits.

Exercise 1.2

1. Differentiate deforestation and degradation?
2. What are the drivers of deforestation and forest degradation?
3. What role do forests play in the carbon cycle?
4. How can forests become carbon dioxide emission sources?

[12]https://www.forestcarbonpartnership.org/what-redd

1.3 What is REDD+

Forests play an important role in climate change mitigation. They store carbon, which helps to slow the pace of climate change as discussed in the previous lesson. Forests also help to regulate the water cycle and carbon cycles, which can help to reduce the impacts of climate change.

REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks. REDD+ is an effort to provide positive incentives to developing countries to contribute to climate change mitigation through activities in the forestry and land-use sectors. REDD+ offers an opportunity to invest in low-carbon pathways to sustainable development through collaborative financing and support though this is yet to be fully realized. The main drivers of deforestation and forest degradation are:

- **Agriculture**: Forests are cleared to make way for agricultural land, such as for crops, livestock, and plantations.
- **Logging**: Forests are logged for timber and other forest products.
- **Mining**: Forests are cleared for mining activities.
- **Infrastructure development**: Forests are cleared to make way for roads, dams, and other infrastructure projects.
- **Fire**: Forests are burned for a variety of reasons, such as to clear land for agriculture or to collect firewood.

Exercise 1.3

1. What does REDD+ stand for?
2. What are the five REDD+ Activities?
3. What are the main drivers of deforestation and degradation?

1.3.1 Background of REDD+

Globally, forests cover about 4 billion ha or 31 percent of the world's land surface. Their destruction releases the stored carbon into the atmosphere causing an imbalance in the carbon cycle. Deforestation is estimated to cause 12% of global GHG emissions, majorly contributing to anthropogenic climate change[13]. REDD+ is an international framework that aims to mitigate climate change by incentivizing developing country efforts that address the problem of deforestation and forest degradation and those that promote conservation, sustainable forest management and afforestation, and reforestation.

UN-REDD defines REDD+ as an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. Established under the United Nations Framework Convention on Climate Change (UNFCCC), policy frameworks for REDD+ implementation have been addressed in the Bali Action Plan, Cancun agreements, the Warsaw REDD+ Framework, and the Paris Agreement among other Conference of Parties (CoP) decisions. REDD+ can generate other substantial benefits in addition to mitigating climate change, such as biodiversity conservation, conservation of water catchments, climate change adaptation, low-emission development, and strengthening forest peoples' rights and livelihoods. REDD+ can also stimulate private sector action, and enable cooperation with businesses to reduce deforestation associated with the production of key global commodities. REDD+ has three phases for implementation as illustrated below

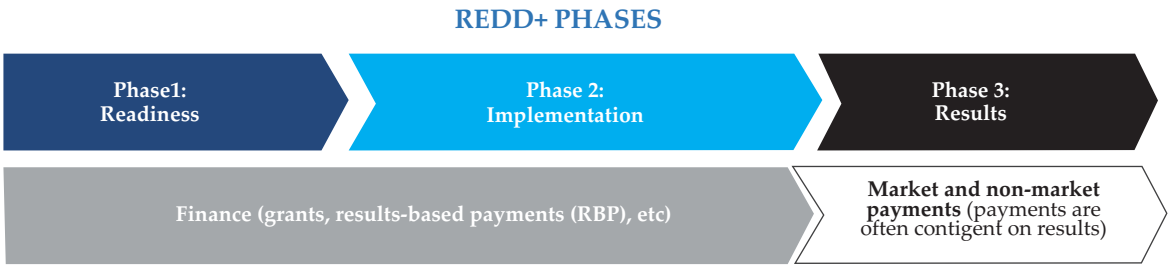


Figure 1.4: REDD+ Phases

[13]FAO, 2018: REDD+

The REDD+ phases are:

1. Readiness:
This phase involves developing national strategies or action plans, policies and measures, and capacity-building.
2. Implementation:
This phase involves implementing the national strategies or action plans, and results-based demonstration activities.
3. Payment for results:
This phase involves verifying and monitoring the emission reductions, and providing payments to countries that achieve their emission reduction targets.

Worth noting is that REDD+ phases are designed to be flexible and adaptable to the specific needs of each country.

1.3.2 REDD+ and UNFCCC Process

In 1972 United Nations Conference on the Human Environment in Stockholm adopted a series of principles for sound management of the environment including the Stockholm Declaration, which contained 26 principles and placed environmental issues at the forefront of international concerns[14].

A key output of the conference was the creation of the United Nations Environment Programme (UNEP) headquartered in Nairobi which is illustrated in **Figure 1.5**.

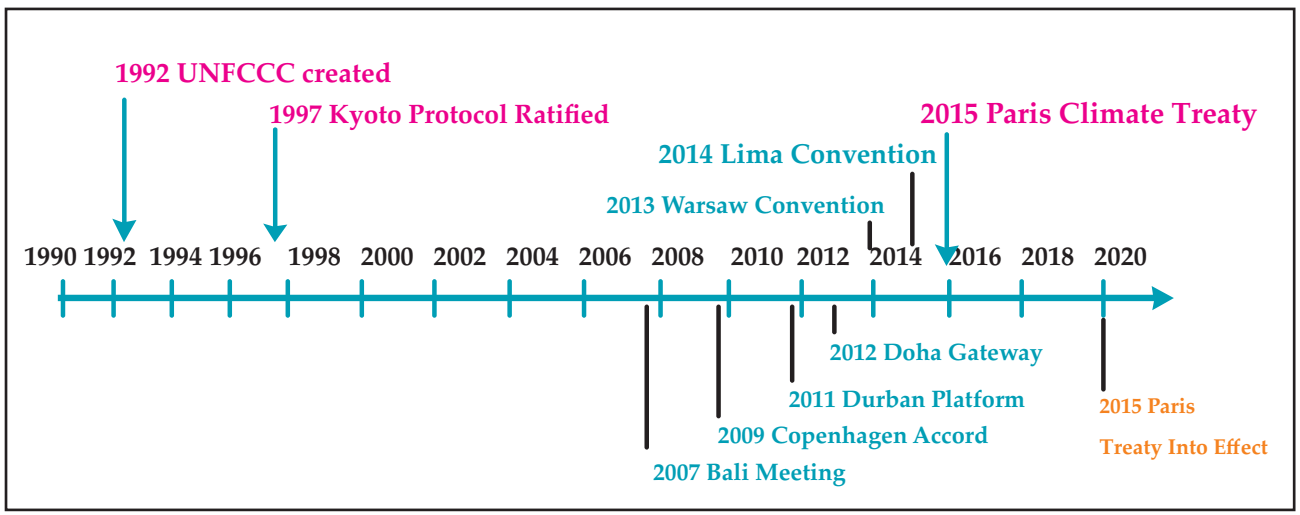


Figure 1.5: REDD+ and UNFCCC Process [15]

[14] https://www.un.org/en/conferences/environment/stockholm1972
[15] https://aslopubs.onlinelibrary.wiley.com/doi/10.1002/lob.10059

REDD+ can be traced back to the early 1990s when environmental groups and governments began to explore ways to reduce deforestation and forest degradation. In 2005, the United Nations Framework Convention on Climate Change (UNFCCC) formally recognized REDD as a potential climate change mitigation tool. The first REDD+ projects were implemented in the early 2010s. These projects were mostly small-scale and experimental, but they helped lay the groundwork for the development of a more comprehensive REDD+ program. In 2013, the UNFCCC adopted the Warsaw Framework for REDD+, which provides a set of guidelines for the implementation of REDD+.[16] Warsaw Framework also established the Green Climate Fund (GCF), which is a financial mechanism that supports REDD+ projects.

In COP 13, the Reduction of Emissions from Deforestation and forest Degradation (REDD) was a central point on the international policy agenda and in COP-14 the '+' was added, which refers to the last section of the REDD +, important decisions reducing greenhouse emissions. Thereafter, Bali Action Plan included REDD in the category of mitigation of climate change. REDD evolved to REDD+ the list of activities that could qualify for incentives such as [17]Conservation of existing forest carbon stocks, Sustainable Forest Management, and Enhancement of forest carbon stocks (Table 1.1). Since the adoption of the Warsaw Framework, there has been a significant increase in the number of REDD+ projects. In 2021, there were over 5,000 REDD+ projects in operation, covering an area of over 100 million hectares.[18]

Table 1.1: Evolution of REDD+

COP	Key Milestones
COP 11, Montreal (2005)	Introduction of REDD to the UNFCCC agenda.
COP 13, Bali (2007)	REDD evolved to become REDD+ as part of the Bali Action Plan decision (2/CP.13) adopted in Bali provided some early methodological guidance for REDD+.
COP 15, Copenhagen (2009)	Several principles and methodological guidelines were defined through the adoption of decision 4/CP.15[19]: Decision 6: states – "We recognize the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries".
COP 16, Cancun (2010)	Parties adopted the 'Cancun Agreements' (Decision 1/ CP.16)[20] that agreed on the scope of REDD+, and methodological issues, including modalities for forest reference levels and national forest monitoring systems (Decision 1/ CP.16, Appendix II).
COP 19, Warsaw (2013)	Methodological issues related to non-carbon benefits of REDD+, and the joint mitigation and adaptation approach to forests finalised. Adoption of the 'Warsaw Framework for REDD+'[21]. which includes a decision on enhancing the coordination of support for the implementation of activities, including institutional arrangements. Adoption of REDD+ decisions on aspects related to finance for results-based actions.

[16] The Special Report of the Intergovernmental Panel on Climate Change (IPCC) on Land Use, Land Use Change and Forestry, 2000 (IPCC SR LULUCF) and Trines, Eveline, P. (with contributions from Gert-Jan Nabuurs and Jan Verhagen) 'Land-Use Change and Forestry in future climate regimes: An inventory of some options' 9 November 2004 Commissioned by the Ministry of Agriculture, Nature and Food Quality. The Netherlands

[17] https://euredd.efi.int/about/about-redd/how-redd-developed/

[18] History of the establishment of the UNFCCC can be found in the following resource: https://unfccc.int/process/the-convention/history-of-the-convention#Essential-background

[19] https://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf

[20] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf

[21] https://unfccc.int/topics/land-use/resources/warsaw-framework-for-redd-plus

COP 21, Paris (2015)	Three REDD+ decisions constituting a 'REDD+ rulebook', were adopted by Parties. Decisions included(i) safeguards, (ii) alternative policy approaches, such as joint mitigation and adaptation (JMA) for the integral and sustainable management of forests, and (iii) non-carbon benefits. With the adoption of these decisions, the negotiations on REDD+ methodological issues and guidance were closed. The rule book provides guidance and process for developing countries to have the results of their REDD+ activities recognized for results-based payments (RBPs) or results-based financing (RBF).

Exercise 1. 4

1. When did REDD change to REDD+?
2. Which year was the UNFCCC formed?
3. What does 'CoP' stand for?
4. Which CoP passed the REDD+ rule book?

1.3.3 Scope of REDD+[22]

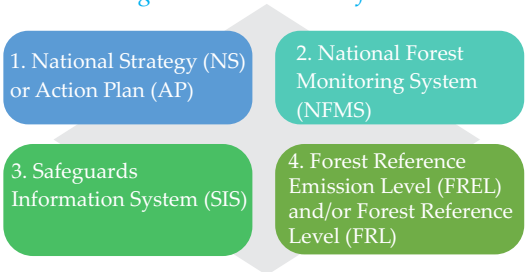
The goal of REDD+ is to incentivize developing countries to maximize the use of forests to mitigate climate change by implementing the five REDD+ activities agreed upon in Cancun (Cancun agreements):

- Reducing emissions from deforestation.
- Reducing emissions from forest degradation.
- Conservation of forest carbon stocks.
- Enhancement of forest carbon stock.
- Sustainable management of forests.

These activities may also provide important climate change adaptation co-benefits. Adaptation refers to building/enhancing the resilience of ecosystems, as well as the resilience of society.

The Cancun Agreements to UNFCCC requires countries participating in REDD+ to have the following four elements in place for REDD+ implementation to access results-based payments **(See Figure 1.6).**

Figure 1.6: Elements of REDD+



[22]https://www.un-redd.org/sites/default/files/2021-10/Fact%20Sheet%201-%20About%20REDD3.pdf

The elements of REDD+ in **Figure 1.6** are further explained in this link:
https://www.youtube.com/embed/YYspivTxRw4?feature=oembed

- **National REDD+ strategy or action plan:** Involves conducting a national deforestation assessment, developing a baseline for deforestation and forest degradation, and identifying the policies and measures that are most likely to be effective in reducing deforestation and forest degradation.
- **National Forest Monitoring System (NFMS)**: This is a system for collecting and analyzing data on forest cover, deforestation, and forest degradation. It is essential for measuring and reporting on emission reductions achieved through REDD+.
- **Safeguard Information System (SIS)**: This is a system for collecting and analyzing data on the social and environmental impacts of REDD+ activities. It is important to ensure that REDD+ does not have negative impacts on people and the environment.
- **Forest Reference Level (FRL):** This is a benchmark against which the emission reductions achieved through REDD+ are measured. It is based on the historical rate of deforestation and forest degradation in a given area.

Exercise 1.5

1. REDD+ has five elements needed for implementation (True / False)
2. REDD+ is not result based and pays off carbon (True / False)
3. REDD+ does not need forests for implementation (True /False)
4. REDD+ is only for developing countries to implement climate mitigation (True / False)

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Module 2: REDD+ Nesting

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Module 2: REDD+ Nesting

2. Module Overview

REDD+ Nesting will be covered in this module with the aim of defining nesting, elements of REDD+ Nesting and REDD+ Nesting approaches. The module pays more focus on nesting so as to increase efficiency and curb the problem of double counting of emissions and enhance a coordinated multistakeholder approach to REDD+ implementation.

The components of the modules are dived into three sections i.e., (REDD+ Nesting, principles of REDD+ Nesting and components of successful approaches to nesting). A case study, a video lesson and a quiz are also provided to enhance understanding of various concepts covered in this module.

Learning Objectives and Outcomes

Learning Objectives

- **Objective 1:** Understand the concept of REDD+ Nesting
- **Objective 2:** Discuss the principles used for REDD+ nesting and their impacts
- **Objective 3:** Explain successful approaches to REDD+ Nesting

Learning Outcomes

1. Be able to discuss the concepts of REDD+ Nesting and their benefits
2. Be able to discuss principles of Nesting and their impacts on REDD+ projects
3. Be able to demonstrate the need for adopting successful approaches to REDD+ Nesting

Lesson Outline

Lesson 2.1:	What is REDD+ Nesting
Lesson 2.2:	Approaches and Elements of REDD+ Nesting
Lesson 2.3:	Components of Successful REDD+ Nesting approaches
Quiz	Module Assessment

2.1 What is REDD+ Nesting

There is no internationally agreed-upon definition for nesting. It often means quite different things when using this term. Others consider nesting in the narrow context of aligning Greenhouse Gases (GHG) "measurement, monitoring and reporting" of smaller-scale systems; for example, projects with larger-scale (subnational or national) systems such as those that align Emission Reduction (ER) claims by carbon projects with the GHG inventories that form the basis for nationally determined contributions (NDCs). Others take a broader view that nesting is about harmonizing the implementation of REDD+ activities at multiple governance levels and geographical scales as illustrated in **Figure 1**[1]. Additionally, other have defined Nesting as a system that allows for site- or subnational-scale REDD+ activities to be incorporated into and formally recognized under national REDD+ programs (**Figure 2.1**), allowing for benefits to flow at all scales; aligned accounting, clarity on ownership and carbon rights, clarity on transactions, etc.

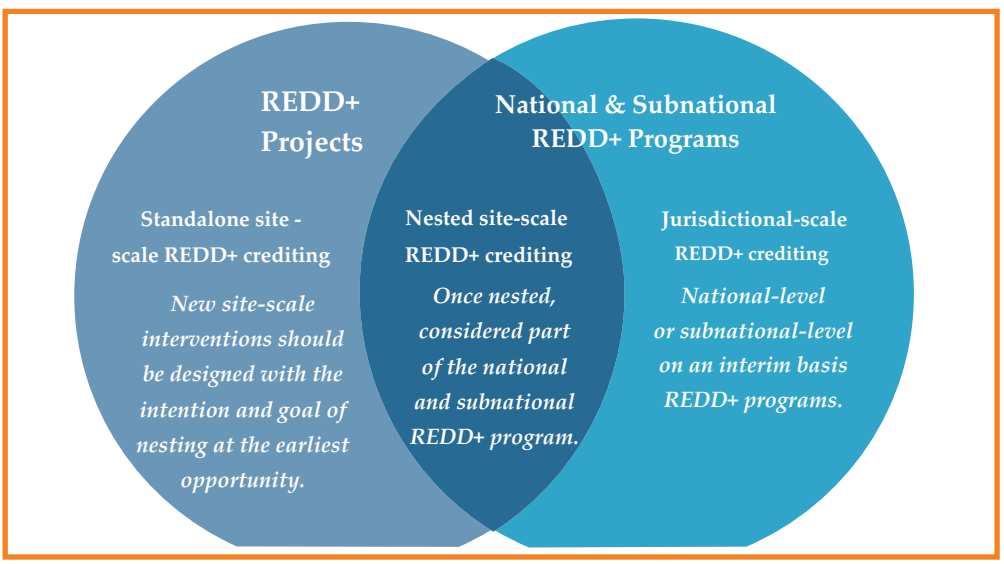


Figure 2.1: Different Levels of REDD+ Nesting

[1] World Bank, 2018: Approaches to REDD+ Nesting: Lessons Learned from Country Experiences

Module 2: REDD+ Nesting

Nesting is a concept that seeks to integrate existing REDD+ projects into larger-scale, national or sub-national REDD+ programs. This can be done in a number of ways, including:

- Accounting for all emissions reductions which means that the emissions reductions from both projects and programs are counted together.

- Cutting out crediting of projects from the broader REDD+ program where projects do not receive credits for their emissions reductions, but they are still able to benefit from the program in other ways, such as through access to funding or technical assistance.

- Integrating project crediting directly within the existing program's approach to benefits sharing with projects being able to sell their credits to the program, which then uses the proceeds to benefit local communities.

The term "nesting" originated from a desire to integrate existing forest carbon projects into larger-scale REDD+ programs while allowing them to continue generating and trading carbon units which shall learn in **Module 3.** A nested system can actively encourage the development of future REDD+ projects and embrace them as a valid, private sector driven mitigation strategy. Earlier on, largescale approaches were endorsed by the UNFCCC, many forest carbon projects had been created and moved. forward more quickly than international processes. Most of these projects use reporting and accounting rules (including methods for calculating baselines and accounting for displacement), apply environmental and social safeguards, and maintain registries that are inconsistent with emerging national systems.[2] Many of them were developed independently of national policy and systems, with carbon rights typically moving offshore and we will learn more on carbon rights in **Module 4**. As such, they can be considered legacy projects, although many are still in active development .[3]

There are two main levels of REDD+ nesting:

- **Centralized nesting:** In this approach, the national government is responsible for setting the reference level, monitoring deforestation and forest degradation, and issuing carbon credits. REDD+ projects are nested within the national program and must comply with the national rules and regulations.

- **Decentralized nesting:** In this approach, the responsibility for setting the reference level, monitoring deforestation and forest degradation, and issuing carbon credits is devolved to subnational or local governments. REDD+ projects are nested within the subnational or local program and must comply with the subnational or local rules and regulations.[4]

[2]Korhonen-Kurki, K., Brockhaus, M., Bushley, B., Babon, A., Gebara, M. F., Kengoum, F., et al. (2016). Coordination and Cross-Sectoral Integration in REDD+: Experiences from Seven Countries. Climate and Development 8 (5): 458–71.

[3]World Bank, 2018: Approaches to REDD+ Nesting Lessons Learned from Country Experiences

[4]D. Lee et al. 2018. Approaches to REDD+ Nesting Lessons Learned from Country Experiences. The World Bank. https:// openknowledge.worldbank.org/handle/10986/29720

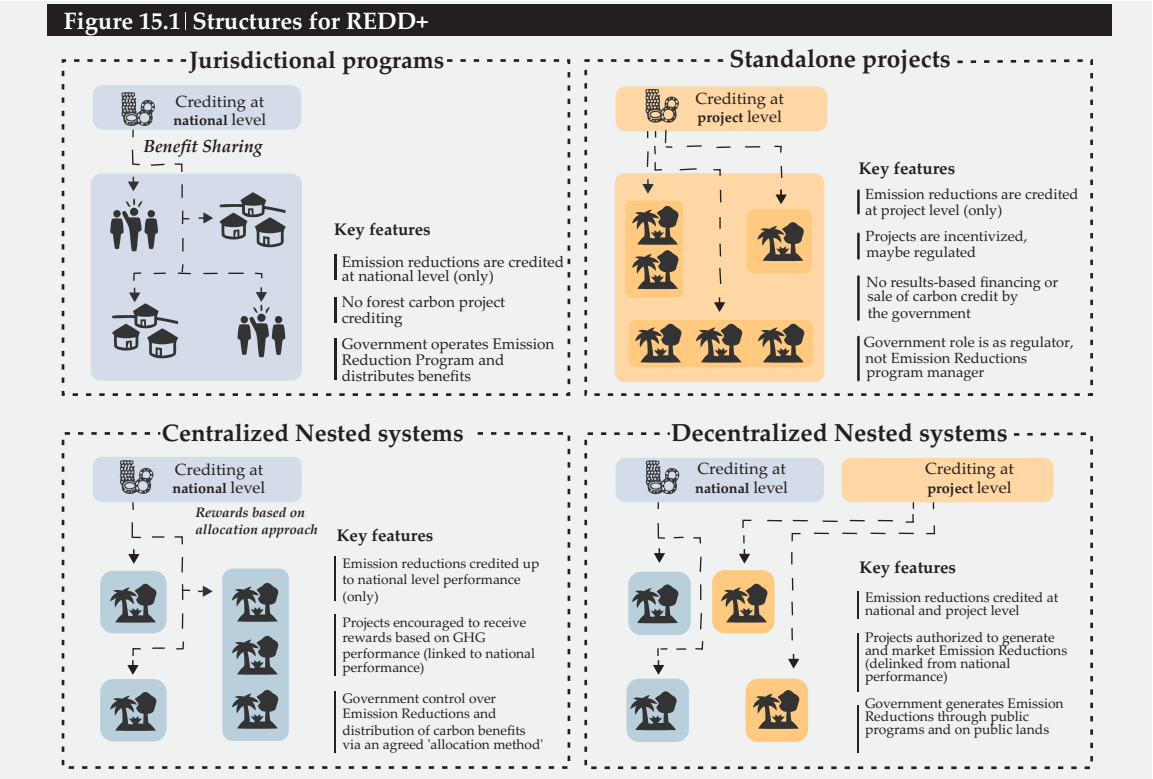


Figure 2.2: How REDD+ Nesting Works[5]

These approaches combine elements of centralized and decentralized nesting, and can be tailored to the specific needs of the country or region. The choice of nesting approach will depend on a number of factors, including the country's political and institutional context, the availability of data and resources, and the desired level of ambition for REDD+. [6]

Exercise 2.1

1. What is REDD+ Nesting?
2. Where did the term 'Nesting' originate?
3. All REDD+ projects should be nested to avoid double emission entries True / False
4. What are the key considerations for REDD+ nesting?

[5]Voluntary Carbon Market Explained (2021). https://vcmprimer.org/chapter-14-how-does-redd-nesting-work/

[6]Ibid

2.1.1 Why REDD+ Nesting

The Paris Agreement has encouraged parties to set their National Determined Contributions (NDCs) as mitigation and adaptation goals. Countries are required to report cumulatively on their NDCs. This makes it necessary to involve all key stakeholders in achieving emission reductions. REDD+ Nesting enables coordination of different sectors and stakeholders towards a country's mitigation efforts. targets
Nesting requires considerable policy and technical support from both the private and public sectors. Therefore, it is important to understand why a country may consider nesting and the potential costs and benefits. There are a number of reasons to consider Nesting which are as follows:[7]

- **Providing early and future benefits**: Local-scale activities (including carbon projects) can stimulate private investment, provide operational on-the ground capacity, and offer lessons (and results) that, ideally, can be replicated. If the conditions are right, such activities/projects can support and become critical building blocks for jurisdictional programs.

- **Creating a pathway for governments to implement policies to reduce emissions**: Particularly in countries where mitigation is expected to occur on private or community-controlled land. For example, a government may enact a policy that provides incentives to landholders or managers who operate at a smaller scale than a national or subnational scheme, thus engaging multiple players to contribute to jurisdictional performance and track the impact of such policies.

- **Reducing the cost of mitigation actions**: This can occur through domestic trading of Emission Reduction units (ERs), including the transfer of carbon units and flows of funds back to a group; international trading, including tracking of ERs and moving them from one country report to another; and the reduction of measurement, reporting, and verification (MRV) and transaction costs. A nested system may also provide potential purchasers of ERs with greater certainty, increasing demand (and price) for such units.

- **Improving national MRV systems**: Projects can support subnational and national estimates by generating additional data at more refined scales. Projects designed to fit within national programs are more likely (though not always) to use reporting and accounting rules consistent with those used at the national scale. This is an important distinction when considering nesting.

Optimize REDD+ finance	Honoring the legal system and decentralized forest management
• Access multiple sources of climate and carbon finance, Including market and non-market opportunities • Enable private sector investment	• Promote REDD+ implementation at multiple scales and equity among actors participating in forest protection • Implement REDD+ in line with the existing land tenure and rights regimes
Align REDD+ with the Paris Agreement	**Create broad support for REDD+**
• Avoid double counting of emission reductions and removals • Optimize the contribution of REDD+ to the country's NDC	• Involve stakeholders on all policy levels in the design of REDD+ policies, programs and projects • Harness broad technical, financial and human capacity for REDD+ implementation

[7] https://documents1.worldbank.org/curated/en/670171523647847532/pdf/Main-report.pdf

2.1.2 Benefits of Nesting

Nesting helps a country to achieve the following;

i. Align baselines and accounting while allowing projects some degree of autonomy in implementing practices and/or selling credits.

ii. Catalyze local actions that can contribute to the national emission reduction targets and allows both national and local REDD+ activities to continue.

iii. Manage carbon leakage by integrating the accounting frameworks for different REDD+ activities. Leakage is a real risk for project-level activities, as activity-shifting, market or other effects, can cause emissions to shift to areas outside their project boundaries

iv. Provides incentives for both public and private entities, enabling REDD+ adoption. For particular socio-ecological circumstances, project developers and local partners on the ground can design and implement local solutions and establish benefit-sharing agreements.

v. Promotes environmental integrity and sets a foundation for avoiding the double counting of ERs by facilitating the alignment of measurement, reporting, and verification (MRV) systems. The accounting and reporting of avoided deforestation (AD) projects and jurisdictional REDD+ programs' greenhouse gas (GHG) emission reductions and removals are aligned via nested REDD+ systems.

vi. Establish institutional arrangements for operating and maintaining the system in order to manage the risks inherent in nesting.

2.1.3 Key Considerations for Nesting[8]

i. Clarity of assigned Responsibilities for Nesting Implementation: Government institutions are mandated to undertake monitoring, verification and accounting for jurisdictional emission reductions. This calls for proper institutional, technical and administration systems for allocation of GHG emission reductions, management of funds and sharing of associated benefits.

ii. Credible REDD+ carbon accounting systems: For effective nested REDD+, governments must have the ability to track and register projects and credits, ensure consistency of data, and share this information transparently. For accountability purposes, there is need for a standardized methodology for baseline and monitoring Emission Reductions (ERs), criteria for apportioning the Forest Reference Emission Levels (FREL) to ensure that project baselines do not exceed the jurisdictional baseline or set maximum crediting levels for projects to promote alignment in baseline setting across REDD+ projects and programs. Governments must also decide on the REDD+ activities that will be included in nesting, and establish definitions, data, and methods for estimating GHG emissions.

iii. Clarity of Rights – Land Rights and Carbon Rights: This needs to be clarified through laws and policies so as to facilitate the implementation of REDD+ Nesting. This will facilitate the integration of the rights in nested REDD+ systems, to facilitate elements of Benefit-sharing.

[8] https://documents1.worldbank.org/curated/en/670171523647847532/pdf/Main-report.pdf

iv. The rights to land and carbon benefits inform the design of nested REDD+ systems: Clarifying land tenure and associated carbon rights through clear laws and contracts facilitates the implementation of REDD+ nesting. The legal rights of existing projects need to be integrated in nested REDD+ systems.

v. Benefit-Sharing Plans: Governments should also establish a clear benefit-sharing plan for how carbon finance from REDD+ projects and programs will be distributed, and how non-monetary incentives will be shared.

The challenges of REDD+ Nesting include:

- Political challenges: Nesting may require changes to national legislation or policies, which can be difficult to achieve and requires extensive stakeholder engagement for consensus.
- Technical challenges: Nesting has a complex aspect when it is to be implemented, thus it is important to ensure that the right systems and procedures are in place.
- Social challenges: Nesting will necessitate addressing concerns from local communities about how benefits will be shared as the carbon projects are being implemented.

Exercise 2.2

1. What are the benefits of REDD+ Nesting?
2. Why should a country consider REDD+ Nesting?
3. What are the key considerations for REDD+ nesting?
4. What are the challenges to REDD+ Nesting?

2.1.4 Principles of REDD+ Nesting

REDD+ Nesting seeks to integrate existing REDD+ projects into larger-scale, national or sub-national REDD+ programs[9] and some of the principles of engagement include:

Figure 2.3: Principles Used in REDD+ Nesting

By following these principles, REDD+ Nesting can be a flexible and scalable approach to improving the efficiency and effectiveness of REDD+ implementation.

[9] https://www.forestcarbonpartnership.org/system/files/documents/English_Anex_XI_Enfoque_y_principios_de%20anidamiento_11052019.pdf

Exercise 2.3

1. What are the principles of REDD+ Nesting?
2. Why do we need to use these principles in REDD+ Nesting?
3. REDD+ nesting principles exclude local communities from benefit sharing True / False

2.1.5 Models for REDD+ Nesting

Nested REDD+ systems take different shapes and forms and can be tailored to different country contexts. Worth noting, they differ in the degree of decentralization of REDD+ implementation and the role that they assign to nonstate actors (private entities, communities, and nongovernmental entities) in conserving and restoring forests. **Decentralized REDD+** systems focus on allowing direct investments into projects while harmonizing and integrating accounting methods as well as defining common criteria for safeguards and stakeholder participation which we shall learn in **Module 5 and 7**. **Centralized REDD+** systems seek to achieve REDD+ outcomes primarily through public policies and allowing governments to (exclusively) receive and allocate REDD+ payments through benefit-sharing systems which will learn in **Module 8**.

There are key factors to consider when selecting a nesting approach as shown in **Table 2.1** below:

Table 2.1: Key Factors to Guide the Nesting Approach

CENTRALIZATION	INCENTIVE OPTIONS	PROPORTION OF INCENTIVES
Will the management and responsibility for the delivery of emissions reductions (i.e., credits) be held at the **national level**, or will it be devolved to subnational actors?.	Will incentives be provided through **financial payments** or through an **allocation of emissions reductions**?.	What proportion of incentives will be passed down to **subnational actors**? How will the allocation be determined?.

There are four general models for REDD+ Nesting implementation:

- A jurisdictional REDD+ program with no crediting of greenhouse gas (GHG) results at the sub-jurisdictional level:

- This model relies on the government's ability to achieve emission reductions via public programs, and to monetize those emission reductions at the jurisdictional level. Local actors contribute by implementing activities defined by the REDD+ program and receive carbon benefits from the government as part of a benefit sharing arrangement.

- A REDD+ program with jurisdictional and project-level GHG accounting and government distribution of funds to projects:

- Under this "centralized nested" model, the government encourages programs and projects and allows for the sharing of emission reductions or equivalent monetary benefits with programs or projects. REDD+ benefits are shared based on GHG performance. However, the rewards for projects depend on jurisdictional performance and government distribution of benefits.

- A REDD+ program with jurisdictional and project-level GHG accounting and independent project financing:

- Under this "decentralized nested" model government allows the crediting and monetization of emission reductions at both the jurisdictional program and project scales. Projects can issue tradable carbon credits that do not depend on jurisdictional performance. In this model, the government can regulate the MRV and safeguards of the projects to ensure that they are in alignment with the national approach.

- Governments can define criteria for project crediting without engaging in jurisdictional REDD+:

- This model does not foresee crediting of emission reductions at the jurisdictional level. Where countries are unable, or do not wish, to develop jurisdictional REDD+ crediting programs, they may still welcome investments in avoided-deforestation projects. In this case, the government may regulate projects, for example, to enhance the environmental integrity of claimed mitigation outcomes from projects, to provide guidance on benefit sharing by projects to ensure vulnerable populations are well served, or to ensure compliance with national safeguards.

2.2 Approaches to REDD+ Nesting

Different approaches to nesting focus on the level of involvement of national governments or subnational entities to be responsible for management of REDD+ actions and delivery of emissions reductions. A blend of approaches can be adopted, involving national government, states and projects. In all cases, accounting for REDD+ outcomes are at national level. Decentralized activities will need to link their monitoring, accounting and reporting to the national level.

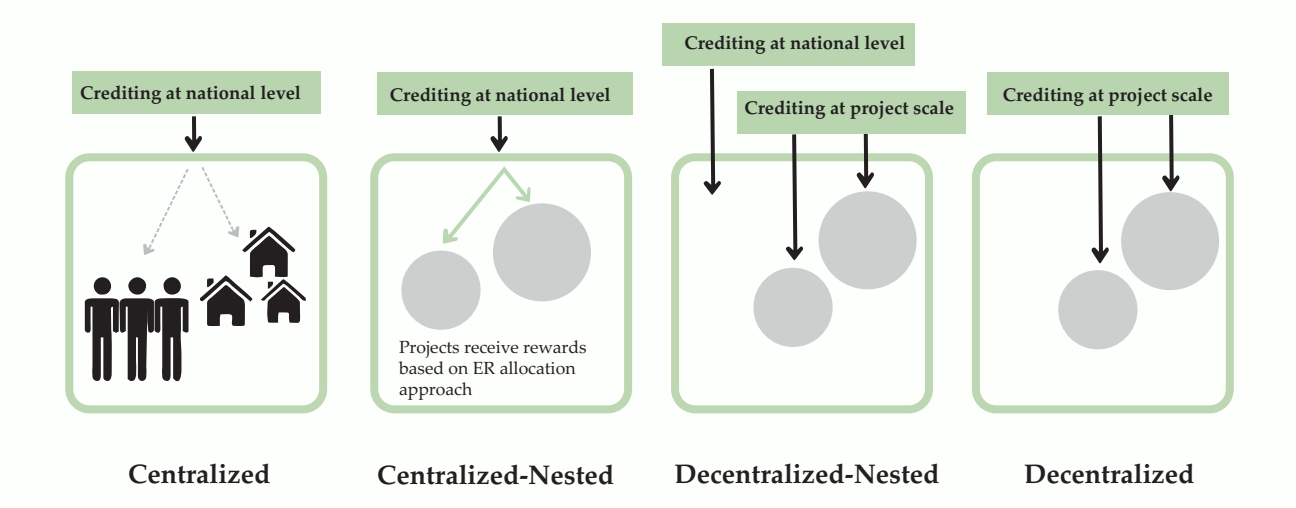


Figure 2.4: Approaches to REDD+ Nesting [10]

This happens to existing REDD+ projects under these four potential nesting approaches:

- Centralized - Project results become folded into the jurisdictional results, and project receives revenue from the jurisdiction, rather than a unique buyer.

- Centralized-nested - Project receives a share of credits from the jurisdiction, which it can then sell to its own buyer(s) **(Figure 2.4).**

- Decentralized-nested - Project claims credits according to its chosen methodology but must receive authorization and report the volume of credits to the jurisdiction, which then makes a corresponding adjustment to its accounts **(Figure 2.5).**

- Decentralized - Project claims its own credits and arranges its own transactions with buyers. Transactions may need to be authorized by the jurisdiction **(Figure 2.6).**

[10] World Bank, 2018: Approaches to REDD+ Nesting Lessons Learned from Country Experiences

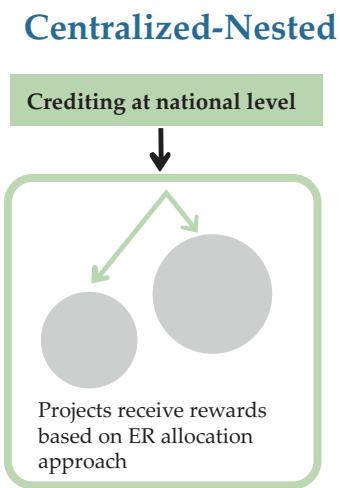
Figures 2.5, 2.6, 2.7 & 2.8 highlights of the different approaches to REDD+ Nesting:

Centralized Nesting: Example: The Democratic Republic of Congo has benefit-sharing arrangements for the Carbon Fund provides payments for GHG performance to carbon projects or option for projects to receive a share of the ERs illustrated in the **Figure 2.4**.

Key features:
- ER's credited at national scale (only).
- No carbon projects.
- Government operates ER program and distributes benefit.

Benefits	Tradeoffs
• Jurisdiction (Government) ownership and control of ER outcomes. • Easier for country to account for and report on ERs towards NDC. • Single coherent reference level and MRV system.	• Government is primary actor in achieving ERs. • High human, institutional and financial capacity and effort required. • May not optimize GHG performance and contributions toward NDC.

Figure 2.5: Centralized REDD+ Nesting Approach[11]



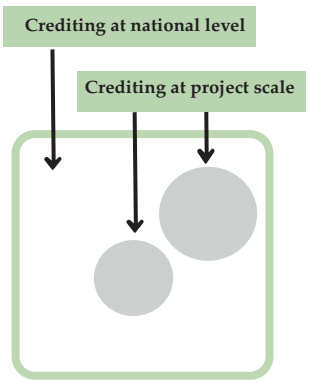
Key features:
- ER's credited up to national scale performance (only)
- Projects are encouraged to receive rewards based on GHG performance (linked to national performance)
- Government control over ERs and distribution of carbon benefits via an agreed 'allocation method'

Benefits	Tradeoffs
• Government can benefit from ERs generated at the project level. • Local action may be incentivized through the ER allocation system.	• Government carries burden for generating and allocating REDD+ benefits. • If project rewards depend on national performance may limit project investment.

Figure 2.6: Centralized Nested Approach

[11]Nesting of REDD+ Initiatives: Manual for Policy Makers 2020, Climate Focus

Dentralized-Nested



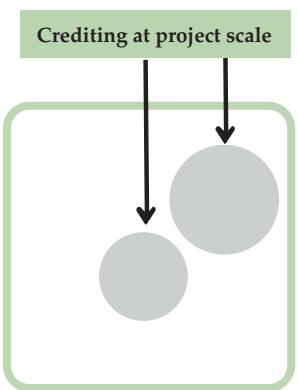
Key features:
- ER's credited at national and project scale.
- Projects authorized to generate and market ERs (delinked from national performance).
- Government generates ER through public programs and on public lands..

Benefits	Tradeoffs
• Mobilizes local action to contribute to forest and climate change goals. • Aligns the GHG accounting of REDD+ projects with the national system.	• Risk of project results being greater than national results. • Requires significant technical capacity & political will to achieve MRV and carbon accounting rules.

Figure 2.7: Decentralized Nested Approach[12]

Example of Decentralized nested in **Figure 2.7**: Colombia permits REDD+ projects and programs that can directly generate ERs. But it has set MRV rules applicable to those projects. The country engages in results-based funding but it also promotes private actions (e.g., Rs from REDD+ projects – allowed to be used as offsets to / of the national carbon tax).

Dentralized



Key features:
- ER's credited up to national scale performance (only).
- Projects are incentivized, maybe regulated.
- No RBF for sale of carbon credits by the government.
- Government role is regulator, not ER program manager.

Benefits	Tradeoffs
• Engages private finance in protecting forests. • Simple structure, with low risk of conflict over carbon rights.	• GHG performance may be more limited to project areas • Requires strong benefits. sharing and safeguards for indigenous peoples & local communities.

Figure 2.8: Decentralized REDD+ Nesting Approach[13]

[12]Nesting of REDD+ Initiatives: Manual for Policy Makers 2020, Climate Focus
[13]Nesting of REDD+ Initiatives: Manual for Policy Makers 2020, Climate Focus

Example for Decentralized Approach: "Countries that consider REDD+ projects to be a good mechanism for addressing the drivers of deforestation, but don´t intend to access results-based payments. Government may want to align projects ER claims with their national forest monitoring."

2.2.1 Elements for Consideration for REDD+ Nesting

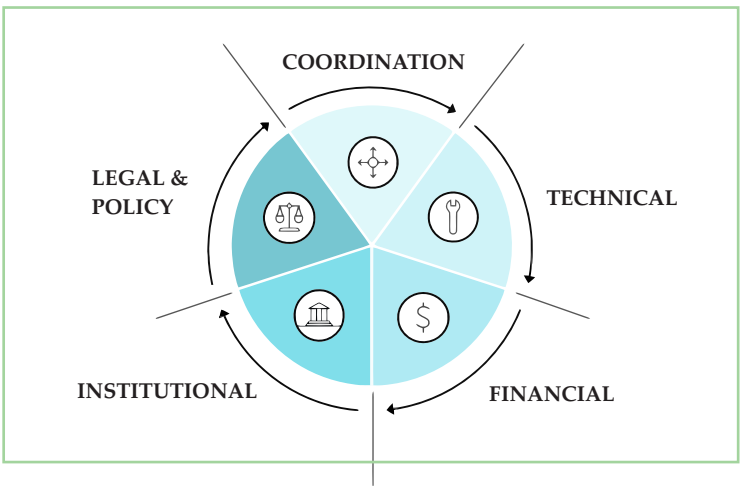


Figure 2.9: Elements to Consider For REDD+ Nesting

The following elements are to considered during REDD+ Nesting in **Figure 2.8**:

1. **Legal and Policy:**
   - **Clarify the ownership and transferability of the rights to carbon** and results of emissions reductions and removals.
   - **Define and adopt rules** to support the operationalization of the REDD+ nesting system, incl. recognition of site scale activities.
   - **Recognize the importance of site-scale REDD+ activities** to leverage finance and support national REDD+ strategy.
   - **Clarify benefit sharing arrangements** among stakeholders.
2. **Coordination:**
   - **Plan for a transition pathway** to harmonize projects with national REDD+ program.
   - **Provide formal confirmation** to existing REDD+ projects during transition phase.
   - **Establish an accounting protocol** for ERs/removals within the national registry.

3. **Technical:**
   - Take a **collaborative approach** making use of all expert knowledge available to develop a science-based baseline, being transparent on the data used and design a **spatially explicit risk-based allocation** methodology for the FREL.
   - Establish a **centralized emissions registry system.**
   - Develop a **clear and consistent MRV policy.**
4. **Financial:**
   - Define **predictable and transparent charges/ levies** that the government is expecting to charge along the project cycle.
   - **Define** how benefits will be shared.
   - Explore the possibility of domestic **carbon pricing schemes.**
5. **Institutional:**
   - Coordinate and establish **clear communication and consultation channels and processes** among national level agencies and non-governmental stakeholders.
   - **Endorse and communicate** with existing and prospective REDD+ project proponents.
   - **Adopt an integrated and cross-cutting approach** among different ministries and systems.

Elements for a successful REDD+ nesting approach

Clear policy and climate goals	Stepwise approach	Multi-stakeholder process
Policy, legal and institutional elements, including carbon rights and benefit sharing	Alignment of technical elements, such as allocation of baseline according to different deforestation risks	Sufficient stakeholder engagement, meeting principles of FPIC and other safeguards
Inclusive and transparent	Fulfills Warsaw Framework "readiness" elements	Others

Figure 2.10: Elements for Successful REDD+ Nesting Approach[14]

[14] CI Psamson Nzioki Presentation, 2022

2.3 Components for Successful Approaches to Nesting

Countries can choose just one of the three models, or a hybrid model comprising a combination of them. REDD+ activities can therefore be[15] implemented, measured, and accounted for at multiple scales, (national level, sub-national level, and project level).

There are three steps to consider as one starts Nesting[16]:

Step 1 "Pre-Nesting"
– A scenario for getting started: Objective of this step: Allow continuation of existing projects whilst the Government increasingly coordinates and tracks project generation and sales of Emissions Reductions and Removals (ERRs) and other benefits.

Overview:

- Projects continue to issue ERRs based on a specific standard (VCS/Plan Vivo/Other relevant standard) with government approval (letter).
- Undertake legal review.
- Develop recommendations on the processes for registering and approving projects and international sale of ERRs in Step 1.
- Seek clarity on carbon rights, or more importantly, rights of emissions reductions/removals.
- Establish national registry.

Step 2 "Early Nesting"
– A scenario for moving forward: Objective of this step: The country has completed its REDD+ elements and starts to receive results-based payments for national level ERRs e.g., Green Climate Fund, bilateral agreement while projects continue to sell ERRs and generate finance from the voluntary market.

Overview:

- No international transfers of ERRs are made for compliance purposes, so the NDC reporting is not affected.
- Sale of ERRs from projects continues for voluntary purposes while tracking on national registry ensures no double payment occurs.
- Projects start to use national level data – progressively as accuracy improves (to be clarified)
- Develop an approach to allocation of reference level or allocation of ERRs to registered projects to be implemented in Step 3

Step 3 "Full Nesting"
– A scenario for full implementation: Objective of this step: REDD+ Nesting is completed, all site-scale activities are fully aligned, existing and new activities are accounted for and recorded in a central registry, ERRs are transferred internationally for compliance purposes.

[15] https://documents1.worldbank.org/curated/en/670171523647847532/pdf/Main-report.pdf
[16] CI Psamson Nzioki Presentation, 2022

Overview:

➲ Country starts to sell ERRs for compliance purposes, for use by another party reporting to UNFCCC (e.g., Art 6, ICAO).

➲ Site-scale activities are fully nested and may be authorized to sell (fully aligned) ERRs for voluntary or compliance purposes.

➲ Double accounting is avoided by cancelling any ERRs transferred internationally for compliance purposes from the national account used for reporting NDCs.

Here are models of REDD+ Nesting:

Jurisdictional/centralized Programs:
In this model, Emission Reductions (ERs) are accounted for at the national scale and rely heavily on the government's ability to achieve Emissions Reductions (ERs) through government programs, and monetize them at the jurisdictional level.[17]

Under the Paris Agreement, countries are expected to meet their NDCs targets. Article 6 provides for use of market mechanisms including through trading of carbon credits to meet NDC targets. Local actors receive payments from the government as part of the government's defined benefit-sharing arrangements.

The government has full control over the accounting and initial allocation of funds generated by the program, but the benefits may be channeled through nongovernmental means below a certain level.
This is illustrated in **Figure 2.11.**

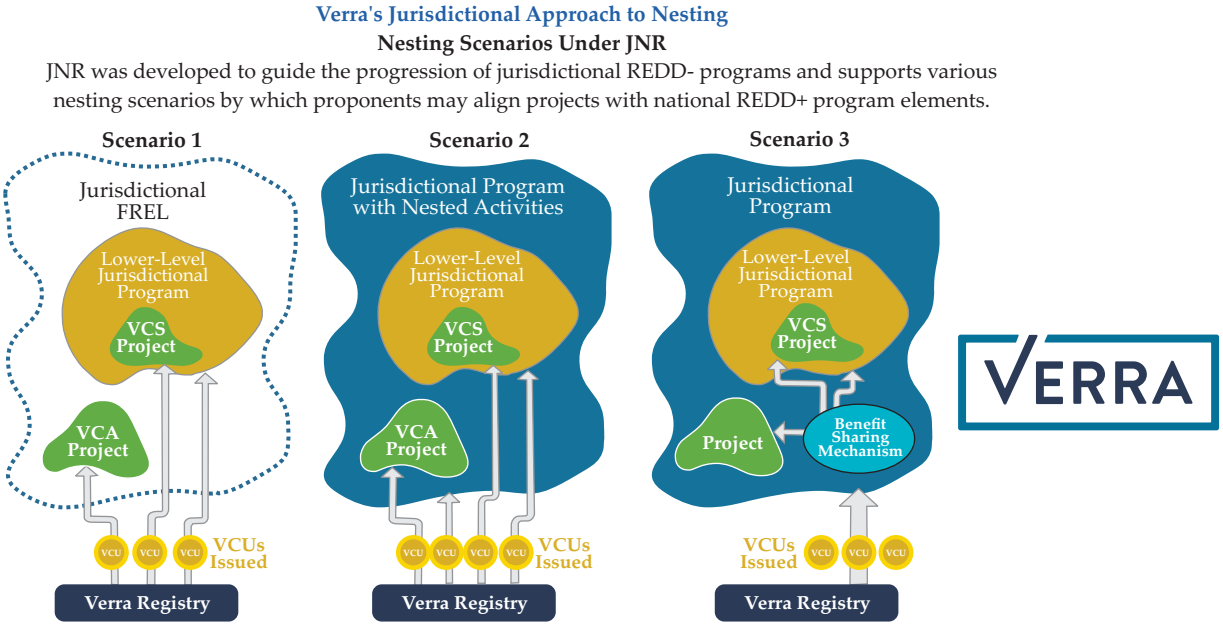


Figure 2.11: Verra's Jurisdictional Approach to Nesting[18]

[17] https://verra.org/programs/jurisdictional-nested-redd-framework/
[18] Pollination-CI Kenya Nesting Workshop, February 2022

Nested REDD: The VCS Jurisdictional and Nested REDD+ (JNR) Framework helps entities with forest-related emission reduction activities to integrate their efforts into governmental climate goals. It also gives governments a framework to generate greenhouse gas credits for their REDD+ programs and to nest projects and other site-specific, lower-level efforts (a tourism operation, a new agroforestry planting, a new governance initiative to control illegal deforestation). Linking site-level forest conservation with jurisdictional goals, capacities, and resources allows governments to incentivize conservation and accelerate progress toward their long-term climate objectives.

The JNR framework lays out the principles by which project-level REDD+ activities can integrate components of government-led programs. Measuring the emission reduction impact of forest conservation projects requires a complex set of rules and requirements.

The two jurisdictional REDD standards- VERRA's Jurisdictional and Nested REDD (JNR), and the Architecture for REDD+ transactions (ART/TREES) define criteria for **Nested REDD**+ to include: Centralised Nesting; Decentralised Nesting.[19]

a) **In Centralized Nested Approach**, carbon credits are only issued at the national scale and projects participate in REDD+ through government-controlled benefit sharing Schemes. However, because the government wishes to encourage projects through incentives that are linked to performance, it develops a system for sharing the benefits it receives from monetizing ERs at the national scale with projects. Approved projects may receive either payments or ERs from the government in accordance with its benefit-sharing arrangements and ER allocation system. The key difference with the jurisdictional model above is that projects can measure their own ER performance, and can receive a share of the ERs. This model implies that rewards for private action are dependent on national performance unless the government is willing to make up for any shortfalls by compensating projects.

b) **In decentralized nesting systems,** projects generate and market credits independently from the government. In this model, the crediting and monetizing of ERs occur at both the national and the project scale. Projects can directly generate and issue tradable ERs that do not depend on national performance. Depending on the context, the government may be required to subtract project credits when calculating their national ER claims. The government regulates project MRV and safeguards to promote alignment with national approaches. Decentralized systems work best in countries where Voluntary Carbon Markets (VCM) project-level activities are under implementation since it accepts existing agreements and avoids legal controversy with participants in existing projects.

In **Figure 2.12,** ART/ TREES is illustrated:

Nesting Under ART-TREES

ART
Architecture for REDD+ Transactions

Although ART does not directly credit project level activities, projects can be implemented under a jurisdictional REDD+ program through a variety of nesting scenarios. ART permits a variety of options so long as the selected option is agreed to by the relevant parties.

REQUIREMENTS

- ART TREES provides guidance on multiple different nesting scenarios.
- Emphasizes agreements between nested projects and jurisdiction.
- Nesting approaches and benefit sharing plans must be developed and implemented using a participatory process.
- Jurisdiction participating in ART must demonstrate rights to the carbon credits, or the benefits from the carbon credits, to have TREES credits issued.
- Jurisdiction must monitor and report entire jurisdictional area, including areas not controlled by jurisdiction.
- TREES does not prescribe an allocation method.

Figure 2.12: Nesting under ART-TREES[20]

[20]World Bank, 2018: Approaches to REDD+ Nesting Lessons Learned from Country Experiences

Case Scenarios in Kenya: In this part, we look at Kenya's scenarios using the above models in **Figure 2.12 and 2.13:**

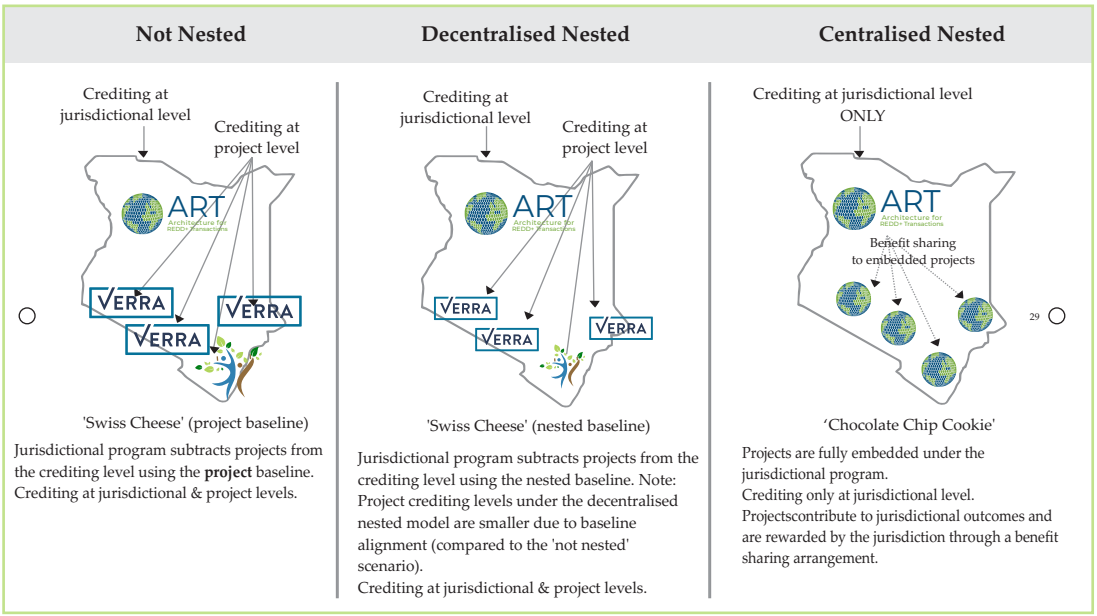


Figure 2.13: Kenya REDD+ Nesting Scenario 1

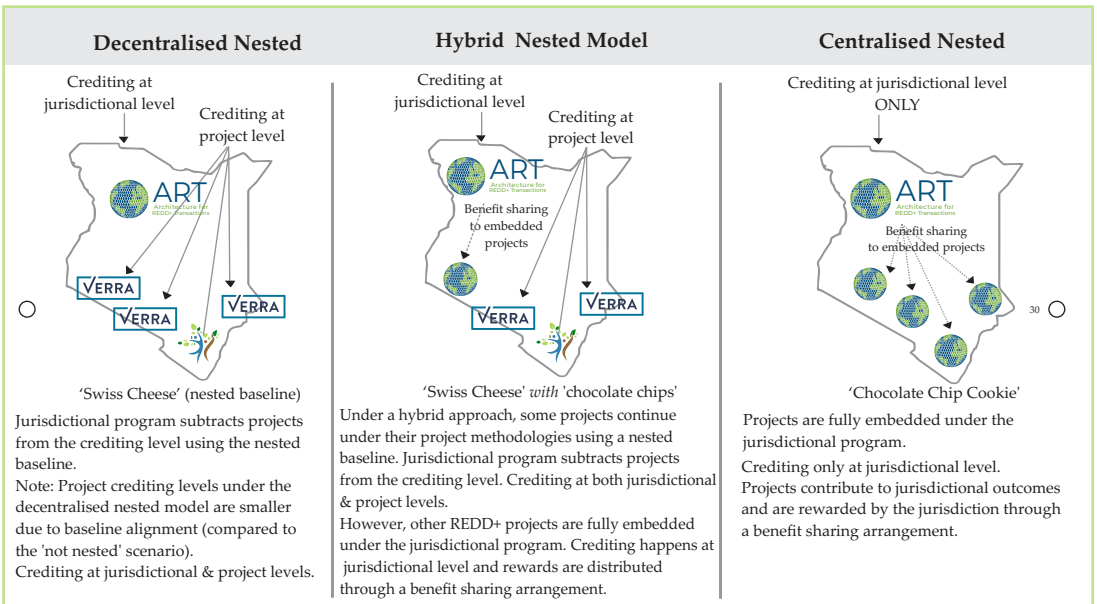


Figure 2.14: Kenya REDD+ Nesting Scenario 2

Project Crediting (Stand Alone): In this model, crediting only occurs at the project scale and the government does not intend to monetize ERs at the national scale. This approach applies to countries that do not depend on national carbon payments to finance government programs.

Exercise 2.4

1. What are the structures of REDD+ Nesting? What would structures be in this case?
2. What is the difference between nested and jurisdictional approaches to REDD+ Nesting?
3. REDD+ nesting models can only be implemented on a national level True / False

2.3.1 Key Considerations for Establishing a REDD+ Nesting Framework

A nesting framework provides guidance on practical considerations for the implementation of a nesting system, such as institutional arrangements, policies, laws and regulations, and establishment of registries.

Effective implementation of nesting could be achieved by the following;

a) ***Consultations:*** Participatory approaches are essential in the process of adopting a nesting strategy, identifying its potential benefits and co-benefits, and the potential spillover effects of REDD+ implementation. They help to ensure the integration of local action into national and subnational REDD+ implementation via benefit-sharing or free-standing REDD+ projects.

b) ***Institutional arrangements:*** Assign clear responsibilities among ministries and public agencies for the operations related to the nesting process. Successful implementation of REDD+ requires policy changes and governance reforms in forestry as well as in other sectors—for example, in order to disburse REDD+ payments. REDD+ is inherently a multilevel endeavor; there is thus a need for policy coherence and coordination across the various levels of governance, as well as the relevant sectors, in order to make it REDD+ work. Nesting adds complexity to policymaking by requiring additional considerations.

c) ***Regulations and approvals:*** Clear rules offer REDD+ actors' legal certainty. Within the context of the REDD+ regulatory framework, a country's nesting strategy and benefit-sharing arrangements may need to be translated into a legal act. Nested models that officially approve projects must define the requirements that projects and project developers are required to meet in order to be formally recognized by the government. Nesting also requires the adoption of the procedures by which projects will be nested in national systems.

d) ***GHG accounting and tracking systems:*** This is to ensure consistency between national, jurisdictional, and project-level processes and results. These systems should consist of data management systems that systematically record and monitor information to ensure transparency and consistency.

Exercise 2.5

1. What are the different models/approaches to REDD+ Nesting?
2. What are the steps in implementing REDD+ Nesting?
3. Consultation is not needed in REDD+ nesting implementation True / False

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Module 3: Market and Non-Market Mechanisms

CONSERVATION INTERNATIONAL

Module 3: Market and Non-Market Mechanisms

3. Module Overview

In this module, concepts including **Article 6**, markets and non-markets, types of markets and REDD+ finance and voluntary markets are covered. In each of the lesson provided, a case study, from practitioners is provided with an assessment quiz to gauge understanding of concepts in this module.

Learning Objectives and Outcomes

Learning Objectives

- **Objective 1:** Understand the Article 6 and its role in carbon markets
- **Objective 2:** Identify the different types of markets and Understand REDD+ finance
- **Objective 3:** Understand the different forest carbon standards in REDD+ Implementation

Learning Outcomes

1. Be able to explain Article 6 of the Paris Agreement on carbon markets
2. Be able to discuss the types of markets and their financing mechanisms
3. Be able to appraise compliance measures for carbon markets for REDD+ projects in different contexts

Lesson Outline

Lesson 3.1:	What are markets and non-market mechanisms
Lesson 3.2:	Article 6 of Paris Agreement
Lesson 3.3:	Types of markets and non-market mechanisms
Lesson 3.4:	REDD+ finance and voluntary markets
Quiz	Module assessment

Module 3: Market and Non-Market Mechanisms

3.1 What are Markets and Non-Market Mechanisms

Carbon markets are tools that countries and companies can use to transition to low-carbon pathways and also meet their net-zero targets through incentivizing climate action by enabling parties to trade carbon credits that are generated by activities that reduce and or remove GHGs from the atmosphere. Carbon credits are tradable certificates or permits that represent the right to emit one tonne of carbon dioxide (CO2) or its equivalent. They are used to track and offset greenhouse gas emissions, and they can be bought and sold by governments, businesses, and individuals.

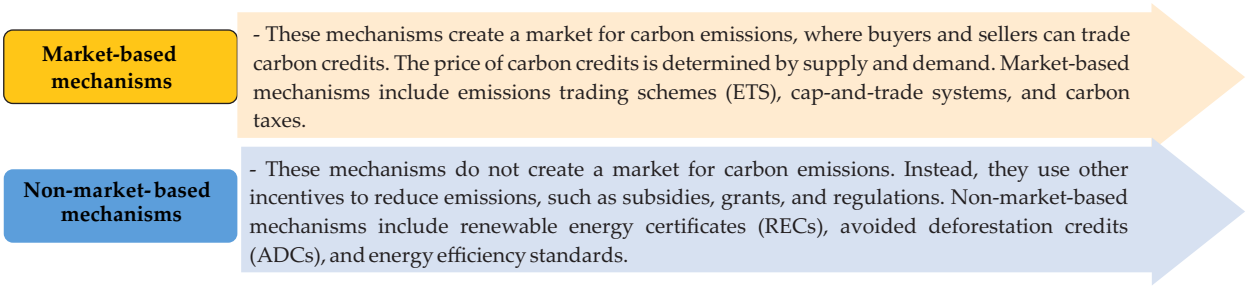


Figure 3.1: What are Market and Non-market Mechanisms

Market-based mechanisms are generally considered to be more efficient than non-market-based mechanisms. This is because they allow the price of carbon to reflect the true cost of emissions. However, market-based mechanisms can also be more volatile, and they can disadvantage poorer countries that do not have the resources to invest in emissions reduction measures.
Non-market-based mechanisms are generally considered to be less efficient than market-based mechanisms. However, they can be more effective in reducing emissions in the short term, and they can be more equitable, as they do not disadvantage poorer countries. The best type of carbon trading mechanism for a particular country or region will depend on a number of factors, including the level of development, the political will, and the availability of resources.

Here are some examples of market-based and non-market-based carbon trading mechanisms:

- **Market-based mechanisms**:

❖ **Emissions trading schemes (ETS):**
An ETS is a system that caps the total amount of greenhouse gases that can be emitted by a group of entities, such as a country, a region, or a sector of the economy. The entities are then allowed to trade emissions allowances with each other.

❖ **Cap-and-trade systems**:
A cap-and-trade system is similar to an ETS, but the government sets a cap on the total amount of greenhouse gases that can be emitted by a country or region. The government then auctions off emissions allowances to entities, and the entities can trade these allowances with each other.

❖ **Carbon taxes**:
A carbon tax is a tax that is levied on the carbon content of fuels. The tax is designed to discourage the use of fossil fuels and to encourage the use of renewable energy sources.

- **Non-market-based mechanisms**:

❖ **Renewable energy certificates (RECs):**
RECs are certificates that are issued to producers of renewable energy. The certificates can then be traded on a market, and they can be used to offset emissions from other sources.

❖ **Avoided deforestation credits (ADCs)**:
ADCs are credits that are issued to countries or companies that reduce deforestation or forest degradation. The credits can then be traded on a market, and they can be used to offset emissions from other sources.

❖ **Energy efficiency standards**:
Energy efficiency standards are regulations that set minimum energy efficiency requirements for products or buildings. The standards.

Exercise 3.3

1. Which is the largest carbon market?
2. What are the carbon mechanisms types?
3. What is Carbon leakage?
4. How does the cap-and-trade work in carbon markets?

Article 6 of the Paris Agreement

Paris Agreement is an international agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation, and finance starting in the year 2020. The **Paris Agreement** is a legally binding international treaty on climate change. Adopted by 196 Parties at the 21st Conference of Parties to the United Nations Framework Convention on Climate Change (COP21) in Paris, France in 2015. Its overarching goal is to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels." The Paris Agreement is **a landmark** in the multilateral climate change process because, for the first time, a binding agreement brings all nations together to combat climate change and adapt to its effects.[1]

The Paris Agreement (PA) is designed to push countries to boost climate resilience through adaptation while investing in low GHG emissions and climate-resilient pathways.[2] The Paris Agreement marked a historic turning point for global climate action, as world leaders came to a consensus on an accord comprised of commitments by 195 nations to combat climate change and adapt to its impacts. For instance, Nationally Determined Contributions (NDCs) are the individual climate action plans that countries submit to the PA. They are the foundation of the PA and are essential for achieving its goals. NDCs can be implemented through either market or non-market approaches under Article 6 of the Paris Agreement. For example, a country could use its NDC to reduce deforestation and forest degradation through a REDD+ project, which is a non-market approach.

The Agreement sets long-term goals to guide all nations:

- Substantially reduce global greenhouse gas emissions to limit the global temperature increase in this century to 2 degrees Celsius while pursuing efforts to limit the increase even further to 1.5 degrees.
- Increasing the ability to adapt to the impacts of climate change.
- Provide financing to developing countries to mitigate climate change, strengthen resilience, and enhance abilities to adapt to climate impacts.

The Paris Agreement ended the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. While the Kyoto Protocol was adopted in 1997 and came into force in 2005. It was a legally binding agreement that only applies to developed countries. Kyoto Protocol sets binding emission reduction targets for developed countries, and it also established a market-based mechanism for trading emission credits.[3]

Paris Agreement was adopted in 2015 and entered into force in 2016. It is a non-legally binding agreement that applies to all countries. Paris Agreement sets a long-term goal of limiting global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. It also requires countries to submit their own climate action plans through Nationally Determined Contributions (NDCs).

[1] https://unfccc.int/process-and-meetings/the-paris-agreement
[2] https://unfccc.int/most-requested/key-aspects-of-the-paris-agreement
[3] Ibid

3.1.1 Key Highlights of the Paris Agreement and Expected Outcomes

- **Long-term net-zero goals**:
  To keep global temperatures below 2 degrees and pursue efforts to limit global temperatures to 1.5 degrees Celsius. To achieve these goals, countries agreed to reduce their emissions to reach net-zero targets which is an emissions goal where the amount of greenhouse gases emitted into the atmosphere is equal to the amount of greenhouse gases removed from the atmosphere by the second half of the century. These goals are expected to complement the Sustainable development goals.

- **Nationally Determined Contributions (NDCs):**
  Represent Parties Pledges to meet the goals of the PA. A country's "contribution" to address climate change is "nationally determined" according to its circumstances, priorities, and capacity. After the PA was ratified, parties were expected to submit their[4] Intended Nationally Determined Contributions (INDCs) which represented the first NDCs and the subsequent NDCs set to be more ambitious than the previous one submitted. All actions in NDCs represent a collective global action against climate change and they are submitted every five years to the UNFCCC secretariat. Governments committed to reporting on their plans and progress for cutting greenhouse gas emissions which would be reviewed and updated after five years in a global stocktake starting 2023. For instance, by the year 2020, countries were expected to provide their updated national climate plans, which are currently referred to as NDCs (commitments made by countries to reduce emissions). They were also expected to submit new targets which would demonstrate progress from previously set targets.[5]

- **Global Stocktake:**
  Global Stocktake is a periodic assessment of the collective progress made by Parties to the Paris Agreement towards achieving the long-term temperature goal of the Agreement and, in the first assessment, the 1.5°C limit. It is a fundamental component of the Agreement, providing a central opportunity for Parties to take stock of their progress, identify gaps, and take action to strengthen their efforts. **Article 13** ambitious than the previous one submitted. All actions in NDCs represent a collective global action against climate change and they are submitted every five years to the UNFCCC secretariat. Governments committed to reporting on their plans and progress for cutting greenhouse gas emissions which would be reviewed and updated after five years in a global stocktake starting 2023. For instance, by the year 2020, countries were expected to provide their updated national climate plans, which are currently referred to as NDCs (commitments made by countries to reduce emissions). They were also expected to submit new targets which would demonstrate progress from previously set targets.[5]

- **Global Stocktake:**
  Global Stocktake is a periodic assessment of the collective progress made by Parties to the Paris Agreement towards achieving the long-term temperature goal of the Agreement and, in the

[4]Visit https://careclimatechange.org/academy/courses/ndcs-1-introduction-to-nationally-determined-contributions/
[5]https://www.investopedia.com/terms/p/paris-agreementcop21.asp

first assessment, the 1.5°C limit. It is a fundamental component of the Agreement, providing a central opportunity for Parties to take stock of their progress, identify gaps, and take action to strengthen their efforts. **Article 13** establishes a global stocktake to assess the collective progress made by Parties to the Agreement towards achieving the long-term temperature goal. After every five years, Countries are expected to assess and give an account of the climate actions they have implemented through adaptation and mitigation, and also report on the support they have received in terms of finance and technology, in order to appraise climate plans and take stock -the Global Stocktake which is expected to commence in 2023.[6]

- **Adaptation and mitigation actions:**
  Parties to the Agreements are encouraged to strengthen resilience and reduce vulnerability by working on their adaptive capacities to respond and reduce the impacts of climate change hazards through adaptation and mitigation measures. These provisions established that developing countries would receive support for planning, and implementation of their climate action activities.[7] In Article 6, use of Clean Development Mechanism (CDM) which is a market-based mechanism under the Kyoto Protocol allows countries to trade emission. reductions. The CDM has been used to finance a number of adaptation projects in developing countries.

- **Loss and damage**:
  The Paris Agreement acknowledged that in the event mitigation and adaptation actions fail, populations would be affected and experience a permanent loss of land, health, livelihoods, and also life. Consequently, it established the [8]Warsaw International Mechanism (WIM) to handle issues of Loss and Damage, which is mandated to come up with strategies to address these issues of loss and damage followed was a task force, created to address climate change-related displacement within the WIM.[9]

Finance:
Finance is a key factor in addressing climate change for investment in low-carbon pathways and support activities to reduce emissions and boost resilience. The agreement advised Developed nations to mobilize funds of about 100 million US Dollars annually to support developing nations from 2020-2025. Categorically, Governments were asked to uphold good governance to enable equitable distribution of public and private finance for adaptation, mitigation efforts, and financial reporting.

- **Transparency:**
  To promote stewardship, the [10]PA developed a basis for all countries to track progress towards their commitments through a robust transparency and accountability system to account for their emissions and track progress on NDCs and submit for expert review and facilitative multilateral consideration. [11]Countries established an enhanced transparency

[6]World Resource Institute, 2015
[7]Ibid
[8]Created to address challenges that arise should climate adaptation and mitigation efforts fail to result in a disaster that will lead to damage of property and loss of life, livelihoods, health deterioration, and exacerbate inequality.
[9]Ibid
[10]https://climate.ec.europa.eu/eu-action/international-action-climate-change/climate-negotiations/paris-agreement_en#:~:text=The%20Paris%20Agreement%20sets%20out,support%20them%20in%20their%20effort
[11]countries established an enhanced transparency framework (ETF)

framework (ETF) to report on actions taken and progress in climate change mitigation, adaptation measures and support provided or received. For example, developed countries are expected to account for any assistance in terms of finance and technological support they provide, as for developing countries, they were expected to provide an account of any financial assistance and capacity support needed and received. For instance, **Article 14** which provides for a mechanism to facilitate technology transfer to developing countries.

- **Capacity building:**
  The PA strongly emphasized climate-related capacity-building, especially for developing countries, and requested the Paris Committee on Capacity Building was formed to identify capacity gaps and needs, develop strategies for capacity development, and, strengthen collaboration between Countries.[12]

- **Legal form:**
  The legal framework is significant to ensure that all consolidated efforts by countries to reduce greenhouse gases emissions as per the Paris Agreement are implemented reported and appraised.[13]

Exercise 3.1

1. How was the Paris Agreement created?
2. What does the Paris Agreement focus on?
3. What are the objectives of the Paris Agreement?

Article 6 of the Paris Agreement provides the framework for international cooperation in reducing greenhouse gas emissions where it takes two main approaches:

Market approaches:
These approaches allow countries to trade emission reductions or removals.

Non-market approaches:
These approaches involve cooperation between countries to reduce emissions without the use of markets.

Key provisions of Article 6 of the Paris Agreement :[14]

- **Article 6.2:**
  This article allows countries to cooperate in reducing greenhouse gas emissions through market approaches. This could involve trading emission reductions or removals, such as through the Clean Development Mechanism (CDM) or the Emission Trading System (ETS).

- **Article 6.4:**
  This article allows countries to cooperate in reducing greenhouse gas emissions through non-market approaches. This could involve cooperation on projects that reduce emissions, such as REDD+ projects.

- **Article 6.8:**
  This article establishes a framework for ensuring that the emission reductions achieved through international cooperation are real, measurable, and verifiable.

[12] https://unfccc.int/process-and-meetings/the-paris-agreement
[13] A checks and balances system ensures there is compliance even where there are no binding agreements.
[14] https://en.wikipedia.org/wiki/List_of_parties_to_the_Paris_Agreement

3.1.2 Importance of Article 6 of the Paris Agreement

Paris Agreement recognizes the importance of REDD+ and encourages countries to cooperate in implementing it. Article 6 of the Paris Agreement provides a framework for this cooperation, but it does not specify how it should be implemented. Operation details of how PA is to be implemented was agreed on in COP 24 in Katowice, Poland in December 2018 which is called the Paris Rulebook and was finalized in COP 26 in Glasgow, Scotland.

This is as follows:

i. Article 6 of the Paris Agreement allows countries to voluntarily cooperate though market and non-market mechanisms in achieving their emission reduction targets set out in their (Nationally Determined Contributions, or NDCs). It sets out 3 different approaches:

a. Article 6.2 creates an opportunity for collaboration of trading GHG emission reductions (or "mitigation outcomes") across countries, this is known as Internationally Transferred Mitigation Outcomes (ITMOs) which can be used towards the achievement of NDCs, and other mitigation schemes to reduce emissions (Charlotte Streck, 2021).

b. Article 6.4 is similar to that of the clean development mechanism under the Kyoto Protocol where credits can be traded from emissions reductions and this would be known as ERs, [15]Emissions Reductions. This article establishes a mechanism for trading GHG emission reductions between countries under the supervision of the Conference of Parties. [16]This provision also supports the achievement of sustainable development.

c. Example of how Article 6. 4 works: For instance, a company in country A can reduce emissions in that country A and ensures reductions are credited and can be sold to company B in another country which buy and use them to meet their emission reduction targets or meet net-zero.

ii. Article 6.8: recognizes non-market approaches to promote mitigation and adaptation. It introduces cooperation through finance, technology transfer, and capacity building, where no trading of emission reductions is involved.

iii. Article 6 supports the establishment of international compliance carbon markets which are governed by the Paris Agreement, where countries can trade carbon credits. [17]The emission reductions that have been authorized for transfer by the selling country's government may be sold to another country, but only one country may count the emission reduction toward its NDC in order to avoid double counting so that global emission reductions are accurate.

Additionally, Article 6 established an [18]accounting mechanism known as **"corresponding adjustment,"** to prevent double counting issues when accounting for emissions reductions in compliance and voluntary carbon markets, where demand is driven by the private sector's voluntary commitments to reduce emissions.

[15]when GHGs reductions/removals are certified, they generate ERs which are tradable as they represent ITMOs
[16]https://unfccc.int/process-and-meetings/the-paris-agreement/article-64-mechanism
[17]https://www.worldbank.org/en/news/feature/2022/05/17/what-you-need-to-know-about-article-6-of-the-paris-agreement
[18]Ibid

Exercise 3.2

1. What does Article 6 of the Paris Agreement provide for?
2. Why is Article 6 important to REDD+ activities?
3. How does the COP 24 in Katowice, Poland impact Article 6?

3.2 Types of Markets and Non-Market Mechanisms

Carbon markets are transactional markets for the issuance, sale, purchase, and retirement of carbon credits. Each carbon credit represents one tonne of greenhouse gas (GHG) emissions – measured in carbon dioxide equivalents (tCO2 e) – that has been reduced or removed from the atmosphere.[19]

There are two main types of carbon markets. They include:
1. Voluntary Carbon market
2. Compliance Carbon markets

3.2.1 Voluntary Carbon Markets

Voluntary carbon markets (VCMs) involve transactions of carbon credits for voluntary climate change mitigation activities. VCMs are outside of regulated or mandated carbon pricing instruments. Corporations, governments, non-governmental organizations (NGOs), local communities, individuals, and other actors participate in VCMs to meet private or public emission reduction commitments or to neutralize GHG emissions of products or services.
Carbon credits are generated by small projects or large programs that reduce or remove emissions. Carbon credits transacted in VCMs are issued and certified according to requirements set by carbon standards or the UNFCCC. Carbon standards are carbon crediting programs, typically NGOs, that establish the methodologies and verification, validation, and monitoring procedures that VCM activities must follow for the standard to issue carbon credits.
The largest carbon standards by volume are Verified Carbon Standard (VCS), Gold Standard (GS), American Carbon Registry (ACR), and Climate Action Reserve (CAR) (**Figure 3.2**). UNFCCC is also developing its own mechanism, Article 6.4. of the Paris Agreement, through which carbon credits that could be transacted in VCMs are issued and certified. This is expected to be similar to the Clean Development Mechanism of the Kyoto Protocol.

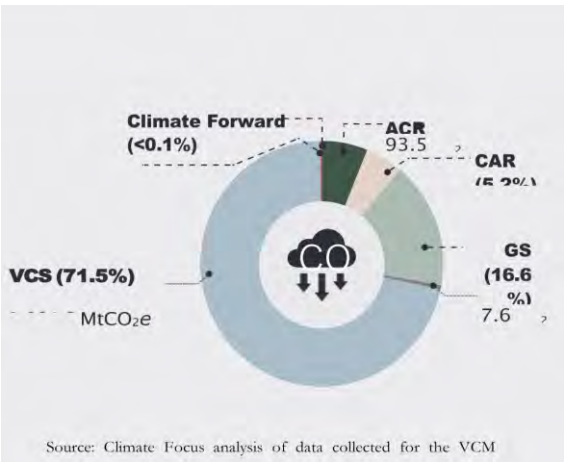


Figure 3.2: Share of the credits issued in the VCM by the four leading Carbon Standards

[19] https://vcmintegrity.org/wp-content/uploads/2023/05/VCMI-VCM-Access-Strategy-Toolkit.pdf

Carbon offset are units earned by firms that have implemented greenhouse gases reduction projects. One offset represents a reduction in one metric ton of atmospheric GHGs. The offset is then sold to an investor, government, or NGO to offset their emissions or for investment purposes. Additionally, as countries strives to meet their NDCs, efforts to reduce emissions and demand for carbon credits have increased and led to innovation for tradable carbon credits in the VCM to assist countries that are unable to achieve their objective to reduce greenhouse gases.

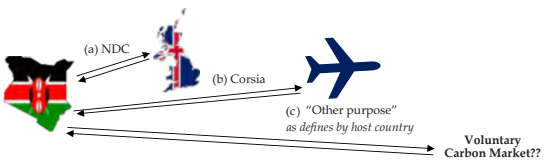
Voluntary carbon markets support a wide diverse environmental project with the [20] aim to reduce or remove greenhouse gas emissions of carbon dioxide from the air. Voluntary carbon markets are seeing an emergence of new project types and shifting buyer priorities for some project types over others. Newer technology-based removal projects are complementing traditional nature-based methods.[21] Demand for voluntary carbon markets is increasing steadily and expected to grow fifteen times by 2030, driven by an increasing number of corporate net zero commitments and increasing availability of point of-sale offsetting, such as carbon-neutral products, which bundle a physical product with carbon credits to offset the physical product's footprint (especially residual emissions). [22] [23]

BOX 3.1: Kenyan Case on VCM Implications

WHAT ARE THE IMPLICATIONS FOR THE VOLUNTARY CARBON MARKET?

Article 6 guidance does not directly govern the voluntary market, but it empowers the selling/host country to decide how to treat voluntary carbon market transactions.

Deciding whether the voluntary carbon market (VCM) is considered an "other purpose" and, therefore, requires a corresponding adjustment (CA) is entirely up to the host country. If a climate investment falls outside of the host country definition of "other purpose," no authorization is needed, which means there is no CA, and the host country can use the mitigation outcomes toward its NDC.



BOTTOM LINE:

There is no overarching rule under Article 6 requiring all VCM credits to be "authorized" or have a CA. However, the question remains (as before) about whether there is a risk of "double claiming" to use units without a CA under the VCM .

Pre-2021 units *(non-CDM) can be sold to voluntary carbon market buyer as they are not applicable under Article 6*

*In countries where the VCM is not considered an "other purpose," the Fe still could be reputational risks for private sector buyers using credits without host country authorization or a CA. We strongly recommend that companies always accurately and transparently communicate any claims associated with voluntary climate investments.

[20] https://greenly.earth/en-gb/blog/company-guide/voluntary-carbon-market-principles-and-examples
[21] https://www.seforall.org/system/files/2022-11/acmi_roadmap_report_2022.pdf
[22] Taskforce on Scaling Voluntary Carbon Markets, Final Report, January 2021
[23] CI Presentation: Psamsom Nzioki, 2023

3.2.2 Compliance Carbon Markets

Compliance markets are markets for carbon offsets created by the need to comply with a regulatory act. They are typically used to cap the total amount of greenhouse gases that can be emitted, and companies that emit less than their limit can sell their surplus credits to companies that emit more than their limit.[24] This system creates an incentive for companies to reduce their emissions, as they can make money by selling their surplus credits. It is an involuntary market tool, governed by Article 6.2 allows countries to trade emission reductions and removals with one another through bilateral or multilateral agreements. The most well-known compliance market is the European Union Emissions Trading System (EU ETS). The EU ETS is a cap-and-trade system that covers about 45% of the EU's greenhouse gas emissions. Other compliance markets include the California Cap-and-Trade Program and the Regional Greenhouse Gas Initiative (RGGI).[25]

Despite efforts from key actors within the climate change regime, for example, governments and conservationists who have discussions on globalizing the compliance market, a major challenge stems from issues surrounding accountability, double counting, and leakages. Furthermore, a lack of cooperation to decide on a shared time frame, price, measures, and accounting delays the realization of net-zero targets.[26]

3.2.3 Voluntary Carbon Markets Visa Vis Compliance Carbon Markets

The compliance markets are usually regulated by mainly national, regional, or international climate regimes. For example, the Kyoto Protocol Clean Development Mechanism. They operate under a cap-and-trade system, of allowances, which can only be traded created to limit the number of GHGs emitted by a country or industry.[27]

Whereas, the voluntary carbon market is unregulated. Participants reduce their emissions voluntarily. Most participants are driven by their environmental social responsibility and it is also good for marketing "carbon neutral". Instead of a cap and trade from the compliance market, the VCM applies a project-based system in which there are unrestricted offsets.

Exercise 3.4

1. What are the types of carbon markets?
2. Compliance markets are not governed by Article 6 True / False
3. Voluntary markets are for the poorer countries that have no resources True / False
4. All the carbon markets are not interested in reducing emissions but trade True / False

[24] https://carboncredits.com/a-guide-to-compliance-carbon-credit-markets/
[25] https://carboncredits.com/a-guide-to-compliance-carbon-credit-markets/
[26] Miranda, 2021
[27] Credits, 2023

3.2.4 Carbon Market Structure

Carbon credits are identified as tradable commodities which are created and issued by Carbon Standards and then purchased by either private or public actors who participate in the VCM.

There are key players in the VCM. This section briefly elaborates on who they are and what role they play in the supply and demand of carbon credits as illustrated in **Figure 3.3**.[28]

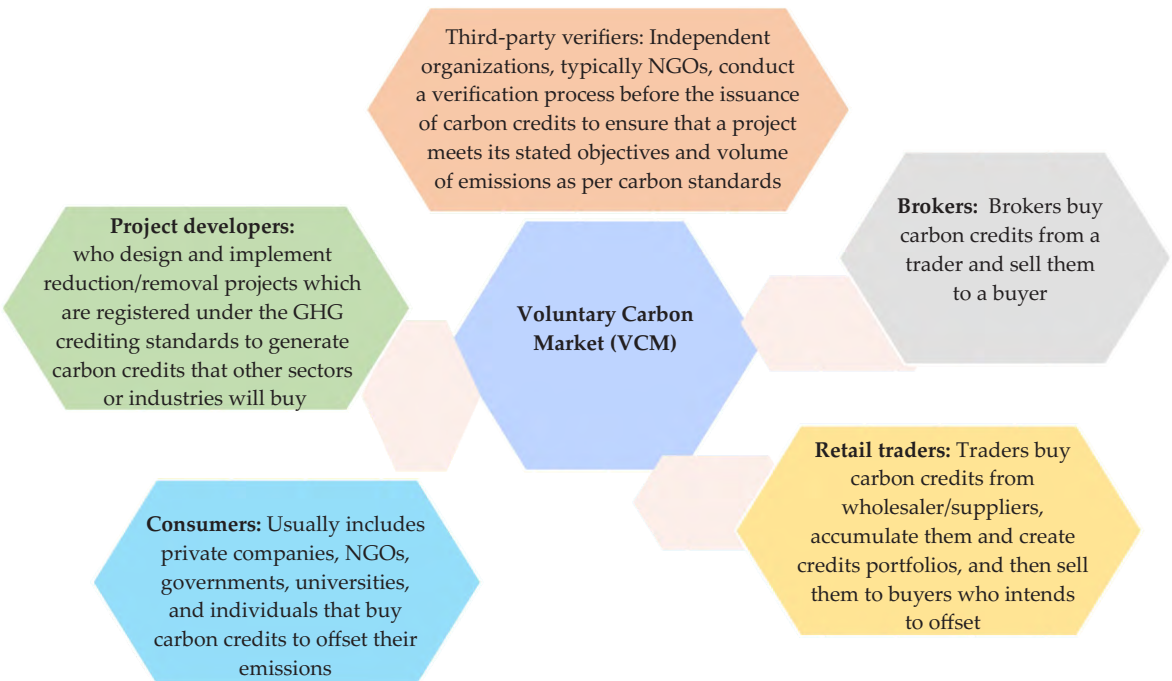


Figure 3.3: Example of Actors in Voluntary Carbon Market

[28] Charlotte Streck, 2021

Figure 3.3: Example of Actors in Voluntary Carbon Market

Carbon Standards, set rules and regulations for activities within the VCM. They also have different arms for setting standards to certify, issue, and facilitate trading in carbon credits. The carbon standards aim to ensure there is credibility on emissions-reduced baselines to safeguard the quality of VCM carbon credits. They also promote good governance as they set clear rules to navigate and participate in the voluntary markets and mechanisms for improving stakeholder engagement and ensuring the rights of individuals are protected. Finally, these standards encourage environmental and social safeguards (refer to Module 5) while carrying out projects which generate tradable carbon credits which upon issuance, issue, carbon standards demand that project developers audit their projects through third-party auditors who are referred to as Validation and Verification Bodies, VVBs.[29]

3.3.1 REDD+ Finance

UNFCCC COP18 in 2012 decided to undertake a work program on results-based finance in 2013 to ensure the full implementation of REDD+ activities and addressed options including ways and means to transfer payments for results-based actions, ways to incentivize non-carbon benefits, and ways to improve the coordination of results-based finance[30]. This was concluded at the UNFCCC COP19 in 2013, in Decision 9/CP.19, which provided guidance to the financing and support for the REDD+ activity implementation for parties and entities financing such activities.[30]

In Decision 9/CP.19, the COP reaffirmed that results-based finance can originate from various sources, including public and private, bilateral and multilateral, and alternative sources. Further, encouraged financing entities, including the Green Climate Fund (GCF) in a key role, to collectively channel adequate and predictable results-based finance in a fair and balanced manner and to work with a view to increase the number of countries that are in a position to obtain and receive payments for results-based actions[31]. Also, encouraged financing entities to continue to provide financial resources to alternative policy approaches, such as joint mitigation and adaptation approaches, for the integral and sustainable management of forests. It also recognized the importance of incentivizing non-carbon benefits for the long-term sustainability of the implementation of REDD+ activities. Decided to establish an information hub on the REDD+ Web Platform to publish information on the results and corresponding results-based payments; and requested the Standing Committee on Finance (SCF) to consider issue of financing for forests in its work on coherence and coordination[32].

REDD+ activities are financed through various sources such as multilateral and bilateral, public and private, and international and domestic, which

[29]Charlotte Streck, 2021

[30]https://cbmjournal.biomedcentral.com/articles/10.1186/s13021-023-00228-y#ref-CR23

[31]GCF (2017). Request for proposals for the pilot programme for REDD-plus results-based payments. GCF/B.18/06. Available at: http://www.greenclimate.fund/ documents/20182/820027/GCF_B.18_06_-_Request_for_proposals_for_the_pilot_programme_for_REDD-plus_results-based_payments.pdf/0691c547110a-4bee-886b-084664326fe1

[32]UNFCCC REDD+ finance COP Work Programme, 2023

are linked to different finance approaches and mechanisms for instance, results-based finance and voluntary carbon markets[33]. Under the UNFCCC, REDD+ is implemented in the following phased approach: phase 1 is readiness, phase 2 is implementation, and phase 3 is results-based payment (**refer to Module 1**). The results and performance of REDD+ are largely measured in terms of emission reductions calculated on the basis of forest reference (emission) levels, and these emission reductions are compensated for by results-based payments in phase 3.[34]

Currently, at least USD 5.4 billion funding has been committed for REDD+ in the three phases through multiple development financial institutions.[35] The main source for the support in the three phases is public finance, and most of the REDD+ finance is spent in the readiness phase. Regarding private finance, the current private sector contribution to REDD+ is mainly through voluntary carbon markets and the project-scale payments for carbon offsets/units. There is no adequate, predictable, and sustainable source of finance for REDD+.

3.3.2 Core Carbon Principles

The Core Carbon Principles (CCPs) are a global benchmark for high-integrity carbon credits that set rigorous thresholds on disclosure and sustainable development as illustrated in Figure 3.3.3 below. These carbon principles were developed with input from hundreds of organizations throughout the voluntary carbon market, the CCPs provide a credible and rigorous means of identifying high-integrity carbon credits that create real, verifiable climate impact, based on the latest science and best practice[37].

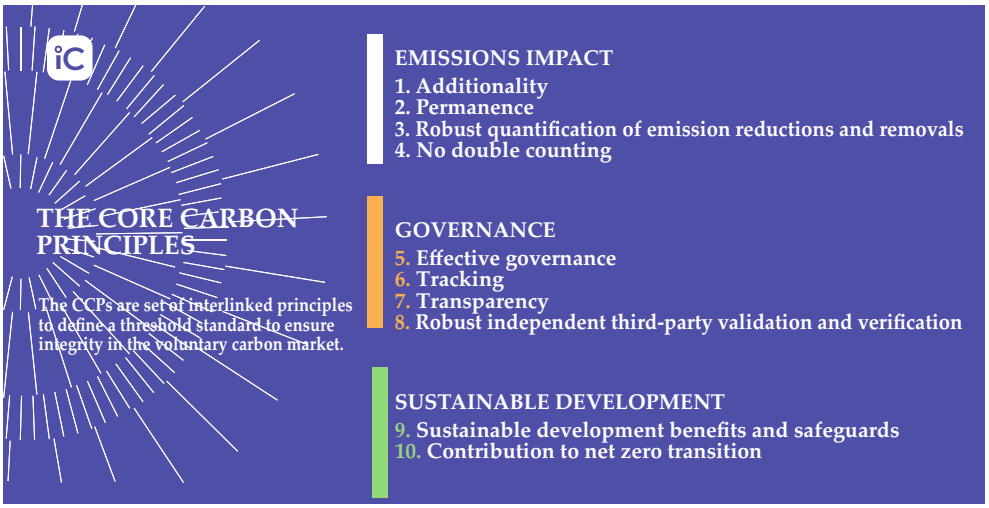


Figure 3.3.3: The Core Carbon Principles[38]

[33]FAO, 2018 REDD+ Finance and Investment

[34]Arts, B.; Ingram, V.; Brockhaus, M. The Performance of REDD+: From Global Governance to Local Practices. *Forests* **2019**, *10*, 837. https://doi.org/10.3390/f10100837

[35]Forest Trends' Ecosystem Marketplace. 2021. State of Forest Carbon Finance 2021. Washington DC: Forest Trends Association

[36]https://cbmjournal.biomedcentral.com/articles/10.1186/s13021-023-00228-y#ref-CR23

[37]https://icvcm.org/the-core-carbon-principles/#:~:text=The%20Core%20Carbon%20Principles%20(CCPs,on%20disclosure%20and%20sustainable%20development

[38]https://icvcm.org/the-core-carbon-principles/#:~:text=The%20Core%20Carbon%20Principles%20(CCPs,on%20disclosure%20and%20sustainable%20development

A. Governance[39]

➲ **Effective governance**

The carbon-crediting program shall have effective program governance to ensure transparency, accountability, continuous improvement and the overall quality of carbon credits.

➲ **Tracking**

The carbon-crediting program shall operate or make use of a registry to uniquely identify, record and track mitigation activities and carbon credits issued to ensure credits can be identified securely and unambiguously.

➲ **Transparency**

The carbon-crediting program shall provide comprehensive and transparent information on all credited mitigation activities. The information shall be publicly available in electronic format and shall be accessible to non-specialized audiences, to enable scrutiny of mitigation activities.

➲ **Robust independent third-party validation and verification**

The carbon-crediting program shall have program-level requirements for robust independent third-party validation and verification of mitigation activities.

B. Emissions Impact[40]

➲ **Additionality**

The greenhouse gas (GHG) emission reductions or removals from the mitigation activity shall be additional, i.e., they would not have occurred in the absence of the incentive created by carbon credit revenues.

➲ **Permanence**

The GHG emission reductions or removals from the mitigation activity shall be permanent or, where there is a risk of reversal, there shall be measures in place to address those risks and compensate reversals.

➲ **Robust quantification of emission reductions and removals**

The GHG emission reductions or removals from the mitigation activity shall be robustly quantified, based on conservative approaches, completeness and scientific methods.

➲ **No double counting**

The GHG emission reductions or removals from the mitigation activity shall not be double counted, i.e., they shall only be counted once towards achieving mitigation targets or goals. Double counting covers double issuance, double claiming, and double use.

C. Sustainable Development[41]

➲ **Sustainable development benefits and safeguards**

The carbon-crediting program shall have clear guidance, tools and compliance procedures to ensure mitigation activities conform with or go beyond widely established industry best practices on social and environmental safeguards while delivering positive sustainable development impacts.

[38]Ibid
[39]https://icvcm.org/the-core-carbon-principles/#:~:text=The%20Core%20Carbon%20Principles%20(CCPs,on%20disclosure%20and%20sustainable%20development
[40]https://icvcm.org/the-core-carbon-principles/#:~:text=The%20Core%20Carbon%20Principles%20(CCPs,on%20disclosure%20and%20sustainable%20development
[41]https://icvcm.org/the-core-carbon-principles/#:~:text=The%20Core%20Carbon%20Principles%20(CCPs,on%20disclosure%20and%20sustainable%20development

➲ **Contribution toward net zero transition**
The mitigation activity shall avoid locking-in levels of GHG emissions, technologies or carbon-intensive practices that are incompatible with the objective of achieving net zero GHG emissions by mid-century.

3.3.3 Carbon Standards in Voluntary Carbon Markets

Carbon standards assure the credibility and high quality of carbon credits issued for trading. Projects seeking to get certified in a reputable standards program follow a rigorous assessment process to generate carbon offsets that are additional, accurately calculated, permanent, not claimed by another entity, and have not caused any social or environmental harm[42]. Standards ensure that the carbon reductions or removals claimed by projects actually happen. Standards play a critical role in the voluntary carbon market which is not regulated by any government agencies. It is worth noting that voluntary carbon standards are now operational in various compliance markets to help them achieve their climate goals (e.g., Colombian and South African domestic carbon markets)[43].

It is important to note that Carbon standards apply different approaches in terms of developing methodologies and requirements to participate in the VCM. For instance, Voluntary Carbon Standard develops practices for projects which use natural resources to reduce GHG emissions from the atmosphere, through nature-based solutions (NbS) (**Module 9**). This section briefly elaborates on the role of carbon standards which include:
Carbon standards provide robust guidelines for project/program developers and auditors to ensure that project activities need to enact environmental and social safeguards generate receive credits. Projects need to adhere to national and international laws and regulations. Another requirement is to hold consultation meetings with local stakeholders as per the following Free, Prior, and Informed Consent (FPIC) processes when involving Indigenous Peoples in projects this will be explained in the module on REDD+ and Indigenous Peoples and Local Communities (**Module 7**).

3.3.3.1 Architecture For REDD+ Transactions, The REDD+ Environmental Excellence Standard (Art/Trees)

The Architecture for REDD+ Transactions (ART), is a global voluntary initiative to promote the environmental and social integrity, and ambition, of carbon emission reductions from the forest and land use sector, in particular to recognize forest countries that deliver high quality REDD+. [44]ART will serve as a global quality benchmark for forest emission reductions, providing confidence to market participants and stakeholders in the integrity of results.
ART's standard, The REDD+ Environmental Excellency Standard (TREES), will be consistent with UNFCCC decisions, including the Warsaw Framework and Cancún Safeguards, with more precise and comprehensive requirements for accounting and crediting; monitoring, reporting

[42]https://ecocart.io/major-carbon-standards/
[43]Chagas, T.; Galt, H.; Lee, D.; Neeff, T. and Streck, C. (2020) A close look at the quality of REDD+ carbon credits
[44]https://wedocs.unep.org/bitstream/handle/20.500.11822/28932/Architecture_REDD%2B.pdf?sequence=1&isAllowed=y

and independent verification; mitigation of leakage and reversal risks; avoidance of double counting; robust environmental and social safeguards; and transparent issuance of serialized units on a public registry.[45]
The ART/TREES carbon standard is known to develop and administer uniform measures to certify projects for reducing emissions through government-sponsored national or large sub-national programs for REDD+. In terms of volume in the VCM, ART/TREES can certify large volumes of GHG emission reductions and removals.

3.3.3.2 FCPF-Forest Carbon Partnership Facility

It's a facility that brings together governments, local communities, indigenous groups, civil society, governments, investors, and businesses to find a solution to reduce GHG emissions through REDD+ efforts through two main funds:

a. The FCPF Readiness fund-assist countries to design their national strategies, Emissions reference levels, safeguards,measuring, reporting, and verification systems, and meet key requirements to implement REDD+ actions to benefit from Results-based finance (RBF)/ Results-based Payments (RBP). The current funding available is $400 million.

b. The FCPF Carbon fund -is used for results-based pilots to countries that have advanced through REDD+ Readiness and implementation phase and have realized emissions reductions in their forest sectors and land use. The current funding available is $ 900 million.

3.3.3.3 Green Climate Fund (GCF)

The Green Climate Fund- was established as a financing mechanism to the UNFCCC to finance climate action to boost green market creation, enable developing countries to transition to low-carbon economies, and promote climate-resilient development. GCF's mandate is to equally support adaptation and mitigation projects and it achieves this through a country-driven approach that prioritizes direct access to the most vulnerable developing countries.

3.3.3.4 CORSIA

It is a market-based measure that offers a cooperative approach to complement efforts to reduce GHGs emitted from international aviation and reduce market falsification and use of sustainable aviation fuels with emissions units generated from the carbon market. Lastly, it supports aviation towards achieving its mid-term goal of being carbon-neutral.[46]

3.3.3.5 Verra Jnr (Jurisdictional and Nested REDD+)

Verra is the world's leading standard that supports climate action and promotes good governance, integrity, and collaboration with businesses and governments to promote sustainability. issues carbon credits upon verification of projects. Verra develops standards for REDD+ forestry sector and agriculture practices to reduce emissions, and waste

[45] https://wedocs.unep.org/bitstream/handle/20.500.11822/28932/Architecture_REDD%2B.pdf?sequence=1&isAllowed=y
[46] ICAO Environment, 2023

management, and promotes gender equality. Some of the labels administered comprise the Climate, Community, and Biodiversity Standard (CCB). The second label is the Sustainable Development Verified Impact Standard (SD VISta), which demonstrates that projects generated high-quality credits through co-benefits.[47]

Some standards certify contributions of VCM activities to Sustainable Development Goals (SDGs), for projects that generate economic, social, and biodiversity benefits and mitigation of climate change. Sustainable development labels can be attached to carbon credits to demonstrate SDG benefits, while others enable projects to issue sustainable development credits that can be traded independently from carbon credits an example The Voluntary Carbon Standards have approved methodologies that generate credits from NbS from Forestry, Agriculture, and Wetlands projects.[48A]

Exercise 3.5

1. What are the types of carbon standards?
2. Carbon offsets and carbon credits are the same terminology True / False
3. Carbon standards only apply to Voluntary Carbon Markets True / False
4. Carbon standards are only useful for verification of emissions True / False

[47] Charlottte Streck, 2021

[48] Charlottte Streck, 2021

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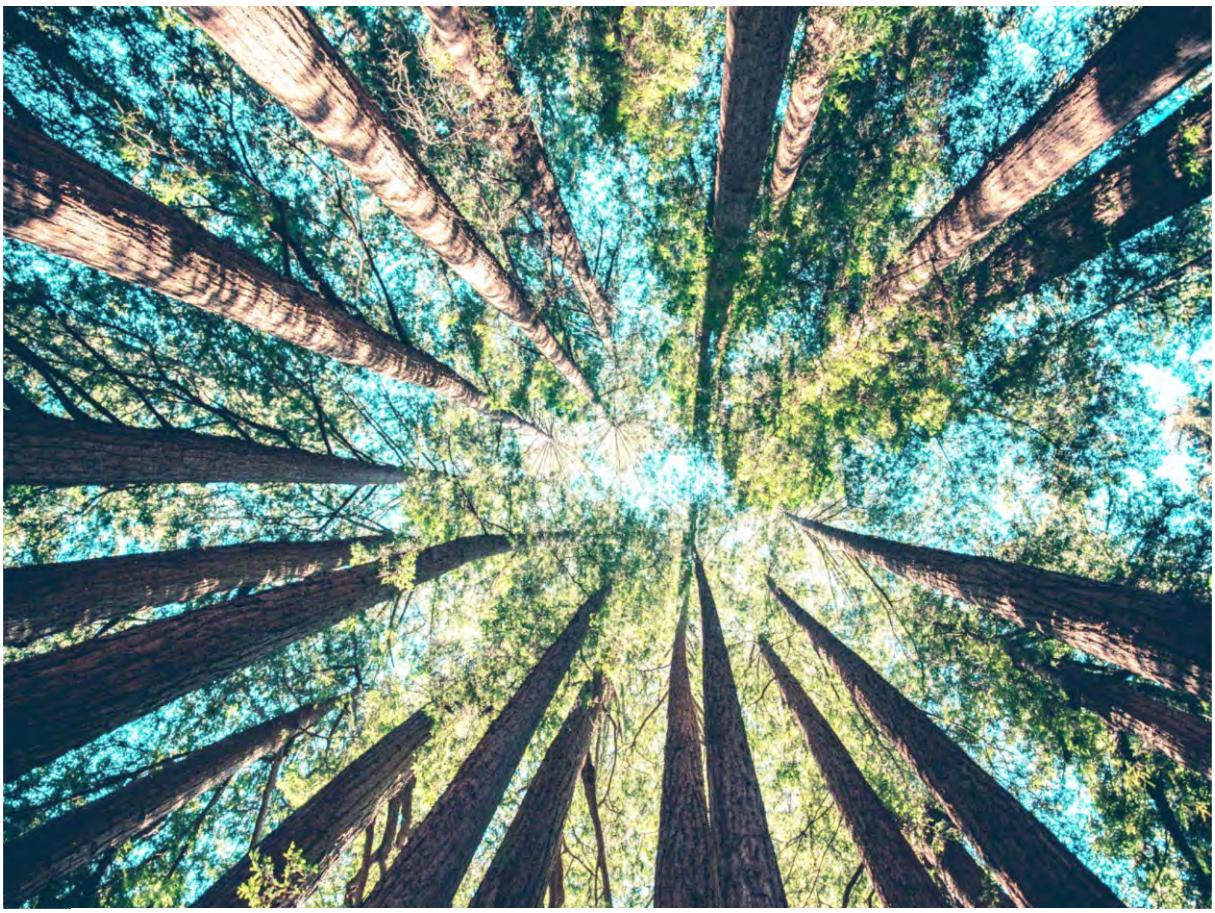


Module 4: Carbon Rights

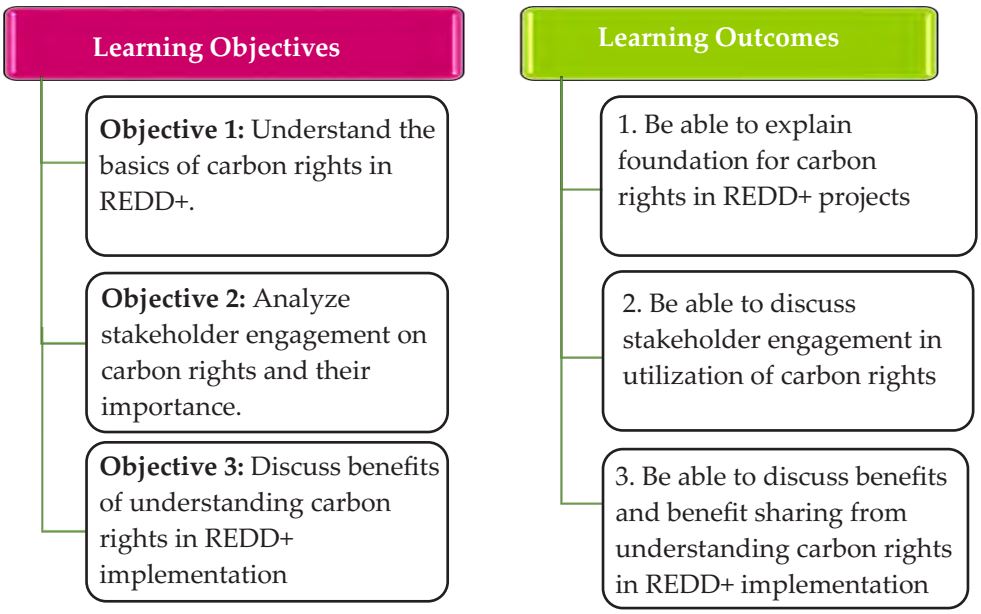
CONSERVATION INTERNATIONAL

Module 4: Carbon Rights

4. Module Overview

In this module, the focus shall be on understanding carbon rights, history of carbon rights, policy framework for carbon rights from a global perspective and role of carbon rights in benefit sharing. Each lesson provides a case study from practitioners and assessment quiz to gauge understanding of concepts covered in this module.

Learning Objectives and Outcomes



Lesson Outline

Lesson 4.1:	**Understanding Carbon Rights**
Lesson 4.2:	**Background of Carbon Rights**
Lesson 4.3:	**Policy frameworks for Carbon Rights**
Lesson 4.4:	**Role of Carbon Rights in Benefit Sharing**
Quiz	**Module assessment**

Module 4: Carbon Rights

4.1 Understanding Carbon Rights

There is no internationally agreed upon definition of carbon rights and the term has been described as shorthand for an excess of different tradable GHG rights".[1] These rights are in essence intangible assets created by legislative and contractual arrangements and in the context of REDD+, carbon rights can be interpreted as rights to sequestered carbon contained in the soil, trees, forest, and land, or as rights to benefits arising from REDD+ projects[2]. Ownership of sequestered carbon as property does not however convey much financial value in itself, until the right is monetized through its recognition in a market or programme that valorizes the right.

The term "carbon rights" refers to the moral claim to benefit from results-based payments (RBP). Carbon rights – **defines who has the right to the benefits generated from carbon emission reductions**, e.g., by selling a carbon credit in voluntary and compliance carbon markets, or through a government-sponsored Payment for Ecosystem Services (PES) scheme. The rights may be but are not certainly tied to the ownership of forest land.

UN-REDD defines carbon rights as claims towards the benefits accrued from carbon sequestered in a given carbon sink such as a forest, or from reduced greenhouse gas emissions[3].

USAID defines Carbon rights as the right to benefit from an increase in sequestered carbon and/or a reduction in GHG emissions from REDD+.

The right is usually quantified as a carbon credit, which denotes a certified unit registered under a recognized carbon standard, with one carbon credit being emissions that have been reduced or removed from the atmosphere by either a project, machine, or other intervention such as REDD+[5]. Generally, carbon rights are either based on the legal control of the emission reduction and removal activity or the legal control of the underlying asset.[6]

Therefore, Carbon rights have varied definitions due to its key features as illustrated below;

[1]Charlotte Streck and Moritz Von Unger, Creating, Regulating and Allocating Rights to Offset and Pollute: Carbon Rights in Practice, Carbon & Climate Law Review, Vol. 10, No. 3, SPECIAL ISSUE ON CARBON RIGHTS (2016), pp. 178-189

[2]Arjuna D and Martijn W, Forest Carbon Rights: Lessons learned from Australia and New Zealand, (Carbon and Climate Law Review, 2016) Volume 3 Issue No. 5 Page 202-208

[3]UN- REDD, 2023

[4]USAID 2012; Forest Carbon Rights Guidebook. A Tool for Framing Legal Rights to Carbon Benefits Generated Through Redd+ Programming. https://www.land-links.org/wp-content/uploads/2016/09/USAID_Land_Tenure_PRRGP_Forest_Carbon_Rights_Guidebook_011314.pdf

[5]Streck C, Shades of REDD+: The right to carbon, the right to land, the rights to decide, (Ecosystem Marketplace 2020)

[6]Streck C and Von Unger M, Creating, Regulating and Allocating Rights to Offset and Pollute: Carbon Rights in Practice, (Climate Change Law Review, 2016) Volume 37 Page 180.

Module 4: Carbon Rights

- Carbon rights are a form of property right that 'commoditize' carbon and allow it to be traded.

- Carbon rights can be separated from broader rights to forest and land and include the right to sequester carbon into the future ('carbon sequestration rights')[7].

- Carbon rights can be created through contract (e.g., as occurs for voluntary forest carbon projects) or by national legislation, the structure of which is influenced by international law standards.[8]

- Carbon credits are intangible rights that are created by people carrying out certain activities under relevant laws or contracts .

- Carbon rights are comparable to intellectual property rights that are intimately associated with an activity.[9]

Box 4.1: Key Contexts for Carbon Rights

1. The physical outcome of the REDD+ action is the preservation of terrestrial carbon.

2. The carbon benefit resulting from the preservation of terrestrial carbon, in carbon transaction is the legal form given to the sequestered carbon. This is referred to as "carbon unit," "carbon credit" or an "emission reduction".

3. The Legal forms might be referred to as a carbon right. These units/credits/emission reductions/rights usually represent the equivalent of one ton of carbon or carbon dioxide (CO2) avoided or sequestered.

4. The legal ownership of the forested land in which the carbon is stored might be different from the entity that develops a project for the purposes of creating carbon credits.

5. The Cancun decisions from COP16 alluded to non-carbon benefits by referring to REDD+ activities in the context of enhancing "other social and environmental benefits". The non-carbon benefits: (non-monetary benefits) arising from REDD+ implementation include poverty reduction, food security, the provision of ecosystem services, or improved forest governance).

Exercise 4.1

1. What are carbon rights?
2. What are the reasons for the varied definitions on carbon rights?
3. What are the key contexts for carbon rights?

[7]Takacs, David, Forest Carbon: Law and Property Rights (November 1, 2009). Conservation International, 2009, Available at SSRN: https://ssrn.com/abstract=1661334
[8]Ogle, 2022
[9]Streck, C. Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance. *Forests* **2020**, *11*, 959. https://doi.org/10.3390/f11090959

Module 4: Carbon Rights

4.1 Background of Carbon Rights

Carbon rights originated from pollutant emission rights. American economist Dales first proposed pollutant emission right, which allows firms to emit pollutants to the environment by following legal regulations. The rights become tradable if government allows it to be traded among firms.[10] Decisions adopted at the United Nations Framework Convention on Climate Change (UNFCCC) from COP 16 to COP 19 were relevant to set the foundation of REDD+. In particular, COP 19 was key to combining the key operational elements in the Warsaw Framework for REDD+ (WFR) to enable the operationalization of REDD+ Results-Based Payments (RBPs).

Considering the association of carbon rights with the developing world and forest-dependent local communities, carbon rights are increasingly being interpreted through a **"human rights lens."** [11]The Universal Declaration of Human Rights recognizes the following basic rights: civil, political economic, social, and cultural . These are further subdivided into three (3) :[13]

1. First-generation Human rights: deal with liberty and participation in political life. They serve to protect the individual from excesses of the state and include freedom of speech, the right to a fair trial, freedom of religion, and voting rights.

2. Second-generation Human rights: relate to equality and are social, economic, and cultural in nature. They emphasize the equality of different members of the population.

3. Third-generation Human rights: go beyond civil and social and are often seen as aspirational. These include: (i) Group and collective rights, (ii) Right to self-determination and right to economic and social development(iii) Civil, political-economic, (iv) social and cultural (v) Right to a healthy environment, (vi) Right to natural resources, (vii) Communication rights, (viii) Right to participation in cultural heritage (x) Rights to intergenerational equity and sustainability.

Carbon rights fall within the category of third-generation human rights. In most jurisdictions, local and indigenous peoples' rights are often recognized on the basis of customary rights and can be explained in **Table 4.1** on the overview of carbon rights systems.

[10]Peng, H., Jiang, R. and Zhou, C. (2017) Literature Review of the Study of Carbon Emission Rights. *Low Carbon Economy*, **8**, 133-138. doi: 10.4236/lce.2017.84011
[11]https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893
[12]Universal Declaration of Human Rights https://www.un.org/en/about-us/universal-declaration-of-human-rights
[13]REDD.Net, 2010

Table 4.1: Overview of Carbon Rights Systems[14]

Overview of carbon rights systems		
Land Ownership	**Carbon Rights**	**Ability of Non-State Entities to Engage in Carbon Offset Activities**
All forest land is owned by the government.	Carbon rights follow the right to the land and are owned by the state, but the right to generate ERRs can be transferred to private entities.	Carbon rights can be transferred to private and public entities via concession or license.
Examples- Democratic Republic of Congo, Mozambique and Vietnam		
State or diverse forest ownership with weak private land titles.	Carbon rights (e.g,, Madagascar)or rights to ecosystem services (e.g., Ecuador) are centralized and managed at the level of the national government.	Private projects or transactions involving ERRs are not permitted.
Examples Ecuador and Madagascar		
Diverse forest ownership with community and private land titles.	Carbon rights are regulated, and special rules apply	Private entities are free to participate in voluntary carbon market projects subject to restrictions.
Examples: Costa Rica, Guatemala and Peru		
Diverse forest ownership with strong community and private titles.	No special regulation Carbon rights pertain to landholders.	Private entitiesare free to participate in voluntary carbon market projects within the limits of the law regarding land use and safeguards.

Exercise 4.2

1. Who introduced the concept of carbon rights?
2. What are the three classifications of carbon rights?
3. REDD+ provides the basis for carbon rights True / False

[14]Carbon Rights Overview, CI Psamson Nzioki Presentation

4.3 Policy Frameworks for Carbon Rights

Successive Conference of the Parties (COPs) has established guidance, rules, and modalities to steer the implementation of REDD+[15], with the 2015 Paris Agreement buttressing the framework's importance in combating climate change. **Article 5** of the Paris Agreement is particularly important for REDD+, as it calls for Parties to take action to conserve and enhance, as appropriate, sinks and reservoirs of GHGs, including forests. Parties are also encouraged to take action to implement and support, including through results-based payments, the existing framework for REDD+ as set out in guidance and decisions agreed under the UNFCCC[16].

Developments under the Paris Agreement further require countries to establish how climate mitigation initiatives will address forest tenure and related rights to manage risks and benefits derived from REDD+[17]. As such, theconcept of carbon rights must be part and parcel of the REDD+ framework and all related discussions at all levels.

From the onset of REDD+, carbon rights have been recognized as important, though from a legal stand-point there have been assertions that "specific domestic laws on carbon rights in REDD+ are not a pre-requisite for defining who holds carbon property or the rights to benefits from carbon trading, as in the absence of specific domestic laws, carbon rights can be interpreted through existing law."[18]

It recognizes that significant gaps or deficiencies in local laws may increase uncertainty as to which entities hold which rights in carbon and this may risk the overall integrity and objectives of the REDD+ scheme.[19]

The international climate change regime has been evolving, and the ongoing developments further inform the increased need for regulatory attention to carbon rights in various jurisdictions in **Figure 4.1**.

Figure 4.1: Developments in the international climate change regime influencing more national focus on carbon rights

[15]See for example milestone REDD+ agreements in COP 19 (Warsaw) and COP 16 (Cancun).
[16]Article 5, Paris Agreement, FCCC/CP/2015/10/Add.1 Decision 1/CP.21
[17]Francesca Felicani-Robles, *Carbon Rights in the Context of Jurisdictional REDD+: Tenure Links and Country-Based Legal Solutions- Information Brief* (FAO, 2022)
[18]Kennett, S. A, and A. J Kwasniak, 2005. "Property Rights and the Legal Framework for Carbon Sequestration on Agricultural Land," *Ottawa L. Rev.* 37: 171, as quoted in Leo Peskett and Gernot Brodnig, Carbon Rights in REDD+: Exploring the Implications for Poor and Vulnerable People, (World Bank and REDD-net, 2011)
[19]Kennett, 2005

These developments include:

➲ **Development and implementation of country Nationally Determined Contributions (NDCs)-**
The Paris Agreement signed in 2015 requires each Party to prepare, communicate and maintain successive NDCs that it intends to achieve to meet the global mitigation target.[20] Among priority areas for NDC action, many countries refer to REDD+ and importantly, countries are keen to ensure they meet their set out NDC targets with action hinged on their priority action areas.[21] As carbon rights are linked to carbon trading, government provision of clarity on the legal nature of these rights, their ownership and legal treatment enables the overall effective working of carbon market activities in a country, to the extent that the use of market mechanisms is in keeping with a country's NDC.

➲ **Article 6 of the Paris Agreement-**
Paris Agreement allows countries to voluntarily cooperate with each other to achieve emission reduction targets set out in their NDCs through co-operative approaches set out in Article 6 of the Agreement (refer to Module 3). Within this developing national framework, an opportunity is created to open the discourse on carbon rights nationally and provide greater clarity on these rights in the context of REDD+ as well as in relation to all other carbon projects that would be subject to Article 6.[23]

➲ **Integrity in the Voluntary Carbon Markets (VCM)-**
VCMs have the potential to mobilize significant private sector climate finance in developing countries generally, and in more specifically offer opportunities for growing nature-based solutions in tropical forest countries.[24]
For example, it is estimated that demand for carbon credits could rise to USD 50 billion by 2030[25]. However, the integrity of the VCM has been questioned, with concerns predominantly on environmental integrity risks as reflected in carbon accounting issues. Broader aspects of high integrity also need to be considered, such as safeguards requirements including for contested issues such as tenure reform and carbon rights (refer to Module 5).[26] Host countries can promote supply-side integrity and governments can leverage VCM finance through program regulators, in which role they can clarify at the country-level carbon rights and corporate claims with respect to the use of carbon credits.[27]

➲ **REDD+ Nesting-**
REDD+ activities are implementable at the national, sub-national and local level (refer to Module 2). In many countries, local level projects have moved ahead of international processes, and there is now a drive to integrate existing forest

[20]Article 4, paragraph 2, Paris Agreement 2
[21]UN REDD, *Linking REDD+, the Paris Agreement, Nationally Determined Contributions and the Sustainable Development Goals: Realizing the Potential of Forests for NDC Enhancement and Implementation*, (UN REDD, 2022).
[22]EY and Gold Standard, *Carbon Credit Rights under the Paris Agreement: How Article 6 and the Implementation of NDCs May Shape Government Approaches to the Carbon Market, and What this Mean for Rights Related to Carbon Credits*, (EY and Gold Standard, 2022)
[23]"World Bank, *Country Processes and Institutional Arrangements for Article 6 Transactions.* Article 6 Approach Paper Series; No. 2, (World Bank, 2021)
[24]Voluntary Carbon Markets Integrity Initiative (VCMI), *VCMI Proposal to Assist Developing Countries to Develop VCM Access Strategies*, Working Paper (VCMI, 2021)
[25]Charlotte Streck et al, *The Voluntary Carbon Market Explained*. (VCM Primer), (Climate Focus, 2021).
[26]*Ana Karla Perea*, High-Integrity Voluntary Carbon Markets (VCM): Emerging Issues in Forest Countries, *(UNDP, 2021)*.
[27]Charlotte Streck et al, *The Voluntary Carbon Market Explained*. (VCM Primer), (Climate Focus, 2021).

carbon projects operating at the local level into larger-scale REDD+ programs at the national level, while allowing them to continue generating and trading carbon units.[28] However, many of the local level projects were developed independently of national policy and systems, with reporting and accounting rules, environmental and social safeguards and use of registries inconsistent with emerging national system, and carbon rights typically moving offshore.[29] As nesting becomes more central to the REDD+ operations in a country, national policy and systems need to consider carbon rights more concretely. [30]

4.3.1 Importance of Carbon Rights

The global perspective on countries' carbon rights is likely to continue to evolve in the years to come. As the world grapples with the challenge of climate change, countries will need to find ways to reduce their emissions in an equitable and effective way. The following tells why Carbon Rights are important:

- **Enable access to carbon finance:**

For a carbon credit / carbon offset to be tradeable, clear legal title is required. In purchase agreements, sellers make representations on unencumbered title where buyers want clear property rights to avoid double-counting. If underlying land tenure is unclear or contested, it is difficult to make appropriate ownership claims in carbon credits generated from the land. This uncertainty affects ability to transact carbon credits. Claims to participate in REDD+ are often based on the concept of 'carbon rights', and clear and uncontested carbon rights are also often a condition for donor funding. For example, the World Bank's Forest Carbon Partnership Facility requires applicants for funds to clarify "the status of rights to carbon and relevant lands to establish a basis for successful implementation of the ER Program." (Section 5.2, Indicator 30.1).

- **Nature of the rights impacts what you can do with them:**

Nature of carbon rights is relevant for legal issues in terms of: the creation, transfer and cancellation of carbon rights; ability to securitize carbon rights; tax and accounting treatment of carbon rights; treatment in bankruptcy; and treatment of derivative interests of carbon rights. Jurisdictions have different approaches (which we learnt in **Module 2)** – For instance, regulated as commodities (US); regulated as financial instruments (EU) - Rights may differ vis-à-vis other parties vis-à-vis the government.

- **Allows for benefit sharing:**

The ownership of carbon rights can affect how carbon (and non-carbon) benefits are managed and shared between stakeholders. Carbon rights holders may not be entitled to exclusive benefits from monetizing the carbon rights. Some countries require benefit sharing by law.

[28] Lee, Donna et al., *Approaches to REDD+ Nesting; Approaches to REDD+ Nesting: Lessons Learned from Country Experiences*, (World Bank, 2018). Global initiatives to promote high integrity include the Voluntary Carbon Markets Integrity Initiative (VCMI) and Integrity Council for the Voluntary Carbon Market

[29] Donna Lee et al., *Approaches to REDD+ Nesting; Approaches to REDD+ Nesting: Lessons Learned from Country Experiences*, (World Bank, 2018)

[30] Pollination and Conservation International, *Lessons Learned from REDD+ Nesting Approaches and Recommendations to Kenya*, (Pollination and Conservation International,2021)

This helps to manage competing interests in the land amongst various stakeholders and often involves provision of consent which will learn in **Module 5.** This can involve individual contracts with holders of carbon rights.

- **Provides clarity on who is responsible and liable for project:** For carbon sequestration projects, there are requirements under the rules of the offsetting standard/methodology that the carbon remains stored for a certain period (called 'permanence'). Carbon rights regimes can clarify who is liable if those carbon stores are lost. Carbon rights can be integrated with land titles registry schemes therefore ensure future landowners are bound by the holder of that right's entitlement to sequestered carbon.

- **Boosts investor confidence in carbon markets:** Investors are cautious to ensure they receive good legal title to any commodity they purchase, which includes carbon credits. As part of the due diligence any investor will do on a carbon offsetting project, they will ensure that the project proponent has legal title to the carbon credits they are seeking to sell and are not open to a competing claim. This is much more straight forward if there is a clear legal regime for carbon ownership underpinned by a transparent and secure land title regime. They will also look to ensure applicable stakeholder consents have been obtained. It is important for there to be an approval from the government for project to generate and sell the carbon –a separate approval from accessing the land itself. If the Government is the owner of carbon, then it helps to have a transparent approvals process for the generation and sale of carbon e.g., Peru (in the Case study 1.1.1.1) highlights the importance of government oversight of project-level carbon reduction activities due to the accounting rules of Article 6 of the Paris Agreement.

Exercise 4.3

1. What is the policy framework for carbon rights?
2. Why are carbon rights important in REDD+?
3. Countries have uniform ways of supporting carbon rights True / False

Box 4.2. Case Study Three: Transfer of carbon rights in Peru

Payment for Ecosystem Services Law, Law No. 30215 (PES Law):
Peru's PES law makes provisions on carbon rights. The PES Law declares that carbon sequestration and storage including from REDD+ activities is the 'patrimony of the nation,' and as such, carbon rights vest in the ownership of the State. The PES Law establishes a framework that guides its REDD+ initiatives in its Natural Protected Areas (NPAs) (publicly owned land that is declared to be a protected area). The Peruvian State, under the PES Law has the mandate to transfer carbon rights from NPAs. The framework allows for private projects by not-for-profit organizations implemented in the NPAs to continue using their own project baselines until they have been successfully nested. The National Protected areas service (SERNANP), on behalf of the Government, is involved in the transactions of emission reduction and emission rights with not-for-profit organizations through the administration of contracts. The entities are entitled to receive compensation, with the approval of Government.

A central registry (RENAMI):
The Government of Peru launched the RENAMI in September 2020, which allows the government to oversee the transaction of carbon credits issued by REDD+ initiatives and therefore manage issues of double counting and accounting for achievement of the NDC. The governance and financial arrangements are documented in the central registry (RENAMI). This approach, combined with the centralized legal ownership of carbon sequestration, establishes a framework for the Government to have broad oversight of the REDD+ initiatives and the associated emissions reductions occurring in Peru, including for such emissions reductions to be counted in Peru's national greenhouse gas inventory. In its Updated NDC submitted in 2020, Peru explains that one of the benefits of the RENAMI is to conduct the transfer of GHG reductions produced by the mitigation actions of private and public actors in order to participate in the national and international carbon markets. Privately run projects are required to register on RENAMI and they calculate their own reference levels in accordance with the requirements of the applicable voluntary carbon standard for REDD+ such as the VCS.

Emission Reduction Units (UREs):
Peru's NDC recognizes the existence of emission reduction units and mandates MINAM to administer, register and conduct the accounting emission reduction units in order to ensure the fulfilment of its NDC's targets and goals in accordance with the Paris Agreement. The country Climate Change Framework Law gives MINAM the authority to explicitly monitor and evaluate the emissions reductions from deforestation and forest degradation and to inform the Secretary to the UNFCCC on its implementation. The framework further gives MINAM a general mandate to oversee REDD+ results-based payments which includes designing a process of receiving, administering and distributing benefits from them.

Projects approval and Nesting Authorities (SERNAP and MINAM):
Peru's SERNANP and MINAM, are the authorities for project approvals and nesting and have established clear processes for REDD+ projects to follow for the proposed sale and transfer of carbon and use of baselines, which gives investors' confidence regarding the integrity of emissions reductions. MINAM also regulates the baselines that REDD+ projects on NPAs can use for the calculation and transfer of GHG emissions reductions. Currently, the country is considering applying to VERRA´s Jurisdictional and Nested REDD+ (JNR)9 and to the REDD+ Environmental Excellence Standard (TREES) of the Architecture for REDD+ transaction (ART TREES). The government is also preparing rules that will require all mitigation measures including REDD+ projects to align their carbon accounting methodologies with the national FREL and MRV systems.
Kenya, when creating its carbon rights transfer and approval policy and legal framework needs to ensure that the framework provides for; both the transfer of carbon rights from public and private owners; a central registry that will further ensure transparency and accountability in the transfer and approval processes of carbon rights; and authorities to oversee the transfer and approval processes. 3132

[31]Pollination and Conservation International, *Lessons Learned from REDD+ Nesting Approaches and Recommendations to Kenya,* (Pollination and Conservation International,2021).
[32]Ibid

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Module 5: REDD+ Safeguards

CONSERVATION INTERNATIONAL

Module 5: REDD+ Safeguards

5. Module Overview

This module highlights REDD+ safeguards which entails doing no harm to people and the environment in project implementation and why it is important. The module also covers the background of REDD+ safeguards, the REDD+ safeguards information systems and finally how to incorporate REDD+ safeguards in project implementation.

Learning Objectives and Outcomes

Learning Objectives	Learning Outcomes
Objective 1: Understand the REDD+ safeguards and their importance in REDD+ projects.	1. Be able to explain REDD+ safeguards in REDD+ implementation (Cancun Agreement).
Objective 2: Identify the principles of REDD+ safeguards in REDD+ projects.	2. Be able to discuss the REDD+ safeguards using the Cancun Agreement .
Objective 3: Appraise the role of REDD+ safeguards in REDD+ implementation.	3. Be able to demonstrate how to incorporate REDD+ safeguards in project implementation.

Lesson Outline

Module 5: REDD+ Safeguards

5.1 What are Safeguards?

'**Safeguards**' refer to processes or policies designed to mitigate risks. REDD+ safeguards cover a range of areas to ensure projects do no harm to people or the environment where they are implemented. Safeguards aim at avoiding potential risks and ***social and environmental damage*** resulting from activities and ensuring social and ***environmental benefits*** from activities and the adoption of best practices. Safeguards ensure that social and environmental issues are taken into account in the design, implementation and evaluation of REDD+

Prior to implementing **safeguards**, it is necessary to ***evaluate potential risks***, ***direct*** and ***indirect benefits***, and ***prospective best practices*** to prevent harm and promote benefits.
This then informs the ***institutional procedures***, ***regulations***, and ***measures*** that will be put into place to safeguard against unfavorable outcomes and to encourage ethical behavior that supports sustainability.

Safeguards, therefore, serve to:[1]
a) Strengthens the quality and sustainability of REDD+ implementation.
b) Ensures confidence that REDD+ is delivering benefits and avoiding/minimizing risks .
c) Contributes to broader national development goals.

5.1.1 The Need for Safeguards in REDD+

REDD+ activities may result in unforeseen social and environmental impacts, therefore the need to put in Safeguard measures to reduce possible negative impacts, as well as manage such impacts in case they occur.

[1] UN-REDD 2022

Examples of Environmental and Social Risks and Benefits have been summarized in Table 5.1:

Table 5.1: Environmental and Social risks and benefits of REDD+[2]

Category	Risks	Benefits
Social	· Contested land/resource rights. · Contested Carbon rights. · Inequitable sharing of benefits. · Social exclusion and elite benefit capture). · Exclusion of indigenous peoples and local communities from decision making. · Displacement/relocation of indigenous peoples from their customary or traditional territories. · Loss of access, use, tenure, and ownership rights over land and resources. · Loss of livelihoods and reduced livelihood security (increased vulnerability). · Loss of traditional cultures and knowledge.	· Clarified/secured resource and tenure rights. · More sustainable rural livelihoods. · Pro-poor rural development. · Improved forest and natural resource governance. · Improved human rights for forest-dependent communities. · Climate change adaptation.
Environmental	· Replacement of natural forest with plantations (loss of biodiversity). · Agricultural intensification and erosion of non-forest biodiversity. · Loss of ecological linkages and creation of ecosystem disturbances and imbalances due to land/resource use changes motivated by carbon stock values of forests. · Disturbance or loss of natural ecological functions and services due to the afforestation of non-forest ecosystems of high biodiversity value or importance for landscape connectivity.	· Restoration, maintenance or enhancement of biodiversity and ecosystem services. · More resilient forest landscapes contributing to climate change adaptation. · Enhanced ecosystem services (such as coastal or watershed protection, increased soil fertility).

Exercise 5.1

1. What are safeguards?
2. What are the environmental and social risks addressed by safeguards?
3. Why do we need to have safeguards in REDD+ project implementation?

[2]UN REDD Programme and Rastall, R. and Nguyen V.D. (2016)

5.2 Background of REDD+ Safeguards

Parties to the UNFCCC agreed to a set of seven safeguards for REDD+ at COP 16 in Cancun in December 2010, referred to as the 'Cancun safeguards.
Further, UNFCCC negotiations since COP16, countries seeking to implement national REDD+ programs must now meet three requirements relating to safeguards:

a) Promote and support the Cancun safeguards throughout the implementation of REDD+ actions;

b) Establish a system (i.e., a safeguards information system, SIS) for providing information on how the Cancun safeguards are being addressed and respected; and

c) Provide summaries of information (SoI) every four years on how the safeguards are being addressed and respected throughout the implementation of REDD+

5.2.1 Cancun Safeguards for REDD+

The safeguards cover the following: governance, rights, participation, consent, environment and social-co-benefits, permanence and leakage. The UNFCCC REDD+ (Cancun) Safeguards[3] measures include:

1) That actions complement or are consistent with the objectives of the national forest programs and relevant international conventions and agreements.

2) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty.

3) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

4) The full and effective participation of relevant stakeholders, in particular, indigenous peoples and local communities.

5) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the [REDD+] actions are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.

6) Actions to address the risks of reversals.

7) Actions to reduce displacement of emissions.

The Cancun Safeguards must be promoted and supported when undertaking REDD+ activities. They aim to ensure that any social and environmental risks of REDD+ actions are minimized and that the benefits are enhanced.

There are two categories of safeguards which are as follows:
(a) Risk-based, or risk management safeguards: These safeguards set out interventions to ensure that the socio-economic and environmental

[3] UNFCCC Decision 1/CP.16, Appendix I, paragraph 2. https://www.youtube.com/embed/HB6jzxDDn5U?feature=oembed

activities being undertaken do not result in harm to the environment, or people. The example of the World Bank Environmental and Social Standards (ESS) are designed to avoid, minimize, reduce or mitigate the adverse environmental and social risks and impacts of projects that it finances, and mandatory for borrowers. Similarly, Food Agriculture Organization (FAO)'s ESS aims to avoid adverse impacts to people and the environment, and to minimize, mitigate, and manage adverse impacts where avoidance is not possible.
Implementation of the ESS, the World Bank has four risk classifications for all projects: (**1**) high risk, (**2**) substantial risk, (**3**) moderate risk, or (**4**) low risk. The appropriate risk classification is based on relevant considerations, including type of project, location, sensitivity, scale of project, nature and magnitude of potential environmental and social risks and impacts, and the capacity and commitment of the borrower to manage environmental and social risks and impacts in a manner compatible with the ESS. Therefore risk-based safeguards require understanding of the likelihood of harmful impacts to people and the environment, and the development of interventions to either avoid/reduce this likelihood, or to manage the adverse impacts where avoidance is not possible. National safeguard systems also include elements of risk management, such as exemplified by Strategic Environmental and Social Assessments (SESA), Environmental Impact Assessments (EIA), Environmental Audits (EA).[4]
In implementation of the United Nations Guiding Principles (UNGPs) on human rights and business, the conduct of human rights due diligence by corporations has emerged as a primary tool to ensure that businesses identify the human rights risks and impacts of their activities, and take measures to avoid or mitigate them, and where the harm has already occurred, ensure that the victims have access to an effective remedy.[5]

(b) Human rights-based safeguards:
The scope of human rights, and fundamental freedoms includes the socio-economic rights, civil and political rights, and the human right to a clean environment recently recognized by the UN Human Rights Council. Civil and political rights include critical freedoms including expression (speech), assembly, movement as well as public participation.
Under international law, States have core obligations to respect, protect and fulfil these human rights and fundamental freedom. For instance, under Kenya's Constitution, the State, and every State organ have a fundamental duty to observe, respect, protect, promote and fulfil the rights and fundamental freedoms in the Bill of Rights. The essence of recognizing and protecting human rights and fundamental freedoms is to preserve the dignity of individuals and communities and to promote social justice and the realization of the potential of all human beings.[6]

Therefore, the rights and fundamental freedoms set out in the Bill of Rights are the framework for social, economic, environmental and cultural policies. These rights and fundamental freedoms are justiciable such that any denial, violation, infringement, or threat can be enforced by the High

[4]https://www.un-redd.org/sites/default/files/2022-05/A%20NATIONAL%20APPROACH%20TO%20SAFEGUARDS%20AND%20A%20SAFEGUARDS%20INFORMATION%20SYSTEM%20FOR%20REDD%2B%20IMPLEMENTATION%20REVISED%20%281%29.pdf
[5]Ibid
[6]https://www.un-redd.org/sites/default/files/2022-05/A%20NATIONAL%20APPROACH%20TO%20SAFEGUARDS%20AND%20A%20SAFEGUARDS%20INFORMATION%20SYSTEM%20FOR%20REDD%2B%20IMPLEMENTATION%20REVISED%20%281%29.pdf

Court upon a petition by any person on their own behalf; on behalf of another person who cannot act in their own name; as a member of, or in the interest of, a group or class of persons; or a person acting in the public interest.[7]

5.2.2 Reasons for Safeguards in REDD+

The safeguards are a prerequisite for result-based payments for REDD+ and the reasons for them illustrated in **Figure 5.1**.

The intention of these safeguards is to[8,9,10]

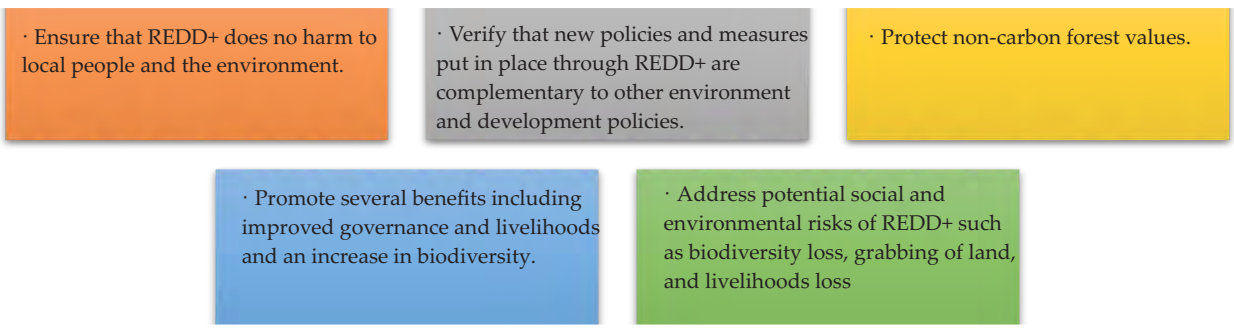

Figure 5.1: Reasons for Safeguards in REDD+

Exercise 5.2

1. When and where were the Cancun REDD+ safeguards created?
2. What are the seven Cancun REDD+ Safeguards?
3. What are the intentions for safeguards in REDD+?

[7] Ibid
[8] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3
[9] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3
[10] https://www.redd-standards.org/index.php?option=com_content&view=article&id=112&Itemid=104

5.3 Social Safeguards

Social and environmental safeguards are critical elements for successful implementation of REDD+. There are five social safeguards which include:

- Stakeholder engagement.
- Grievance and Redress mechanisms (GRM).
- Access restrictions and Free, Prior and Informed Consent (FPIC).
- Benefit sharing.
- Gender responsive approaches **(refer to Module 6**).

5.3.1 Benefit Sharing

In the context of REDD+, benefit sharing refers to the distribution of both the monetary and the non-monetary benefits generated through the implementation of REDD+ projects. This lesson looks at how such benefits can be shared, so as to enhance the sustainability of REDD+ interventions.[11]

Key terminologies and concepts in benefit sharing as follows:

- **Benefit Sharing:**

▪ The Forest Carbon Partnership Mechanism defines benefit sharing as the intentional transfer of monetary and/or non-monetary incentives (goods, services, or other benefits) to stakeholders funded by results-based finance[12].

▪ IUCN defines Benefit-sharing for REDD as agreements between stakeholders about the distribution of monetary benefits from the commercialization of forest carbon[13].

▪ CIFOR defines it as the distribution of both the monetary and the non-monetary benefits generated through the implementation of REDD+ projects and programs.[14]

- **Benefit Sharing Mechanism:**

The system(s) or channel(s) through which monetary and/or non-monetary benefits are distributed.

- **Benefit sharing arrangements:**

A description of the processes for the distribution of monetary and non-monetary benefits to beneficiaries, including the mechanism and processes by which such benefits will be distributed.

Results-based REDD+ payment schemes, such as the GCF or The Forest Carbon Partnership Facility (FCPF) Carbon Fund, typically require countries to develop a benefit-sharing plan or to define details on the use of proceeds.[15] Under ART-TREES,[16] the jurisdictional entity must describe any agreements in place, or that will be in place, for the transfer of ER rights or benefit allocation arrangements with landowners or resource rights holders that exist with project owners, landowners and other collective rights holders, including Indigenous Peoples and other local communities which we shall learn in **Module 7.**

5.1.1.1 Elements of Benefit Sharing in REDD+

"There are no explicit benefit-sharing requirements within the UNFCCC frameworks therefore countries need to decide what approach to benefit-sharing will be most appropriate for their REDD+ programmes (and any project-level activities within them). Drawing on practical experience in natural resource management and early forest carbon projects" - ***Defining the Legal Elements of Benefit Sharing, supra, note 17, at 269-280.***

[12]https://www.forestcarbonpartnership.org/bio-carbon/en/bd-bs-mechanism.html#

[13]IUCN 2009: REDD-plus and Benefit sharing. https://portals.iucn.org/library/sites/library/files/documents/2009-068.pdf

[14]Thu T. Pham et al., *Approaches to Benefit Sharing: A Preliminary Comparative Analysis of 13 REDD+ Countries* (Bogor: CIFOR, 2013) 1, at para. 2

[15]FAO, 2022

[16]ART TREEs is an Environmental Excellence Standard for the quantification, monitoring, reporting and verification of Greenhouse Gas (GHG) emission reductions and removals from REDD+ activities at a jurisdictional and national scale.

The different "elements" of benefit sharing include:

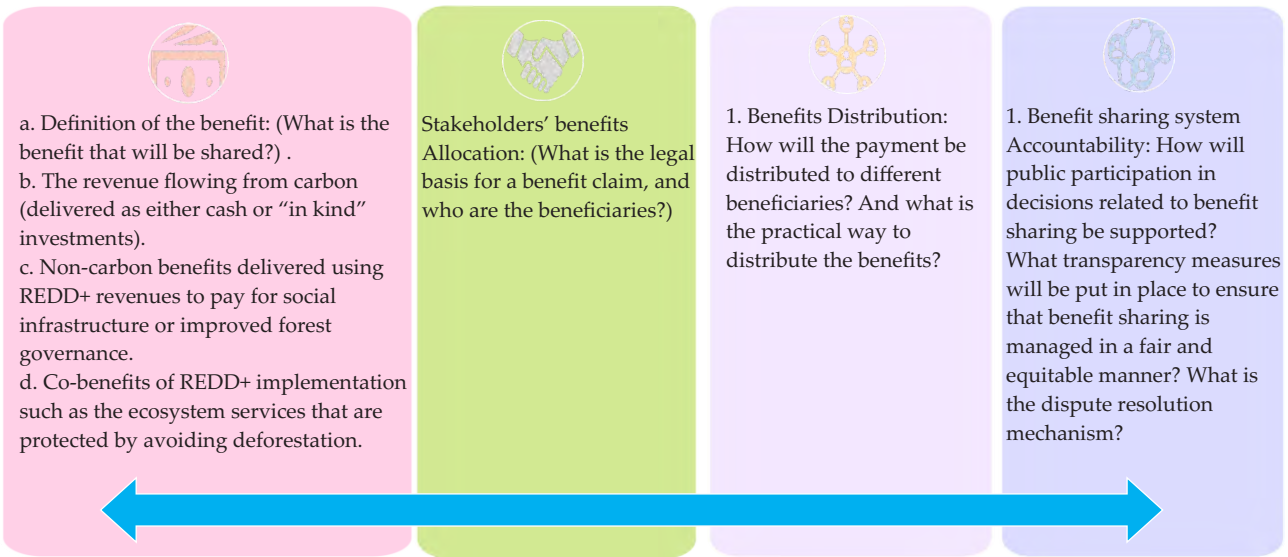

Figure 5.2: Benefit Sharing Elements

IUCN has identified 5 key features of a well well-functioning benefit sharing mechanism as summarized in **Table 5.2** :

Table 5.2: Features of a Well-Functioning Benefit-Sharing Mechanism

Key area		Feature of benefits sharing mechanism	Results in…
1.	**Stakeholder engagement**	Identifies stakeholders, consults with them, and builds local capacity for them to engage.	Basis for determining incentives, builds, ownership, trust and legitimacy.
2.	**Incentive design**	Estimates costs of people's sacrifices, determines level, form and timing of benefit distribution.	Clear and direct incentives for stakeholders to engage in REDD-plus activities.
3.	**Delivery mechanism**	Ensures proper procedures for reporting, auditing, and monitoring of benefit streams.	General trust and legitimacy, and effective safeguards against corruption.
4.	**Transparency provisions**	Harnesses internal and external forces for increased transparency.	Cost-effective, meaningful levels of accountability.
5.	**Dispute settlement**	Prepares for changes in agreements, adopts dispute settlement mechanisms.	Avoids costly conflict, disciplines actors and reduces uncertainty.

Source[17]

[17]IUCN (2009) REDD-plus and Benefit-sharing Experiences in forest conservation and Other Resource management sectors

Exercise 5.3

1. What are the elements of benefit sharing?
2. What are the features of a good benefit sharing mechanism?
3. What are the points to consider in selecting beneficiaries in REDD+?
4. Why has the Kasigau Corridor REDD+ Project benefit sharing successful?

5.3.2 Stakeholder Engagement

Challenges encountered in REDD+ interventions for developing countries include balancing the incorporation of the power of various stakeholders in decision making.[18] The Cancun Safeguards, provide a robust and clear guidance on stakeholder engagement requiring countries to ensure full and effective participation of relevant stakeholders, more so Indigenous Peoples and Local Communities. Importantly, four of the seven Cancun safeguards are most directly related to stakeholder engagement using participation to builds trust and reduce conflict between stakeholders. Stakeholder engagement should be informed by participation rights enshrined as basic human rights in many national constitutions and legal frameworks, as well as by international law and multilateral environmental agreements.[19]

Key elements of a good stakeholder engagement framework include:

- Requirement for stakeholder mapping to identify vulnerable groups.
- Stakeholder Engagement Plans (SEPs) should be developed.
- SEPs should cover the full project cycle.
- SEPs should be developed in a consultative manner and ensure that views and interests of the most directly affected stakeholders are adequately reflected in its design and execution.
- SEP should have robust disclosure commitments.
- Include as appropriate the participation of stakeholders throughout the implementation of the project.
- SEP should be disclosed and regularly updated.
- SEP should provide for free, prior and informed consent (FPIC) for Indigenous Peoples and Local Communities.
- SEPs should incorporate an appropriate Feedback, Grievance and Redress Mechanism.

Approaches to stakeholder engagement can promote participation that ranges from weak (info sharing) to strong (control over decision making) depending on the objectives.[20]

[18]Stakeholders are defined as those groups that have a stake/interest/right in the forest and those that will be affected either negatively or positively by REDD+ activities. They include relevant government agencies, formal and informal forest users, private sector entities, NGOs, Indigenous Peoples and forest dependent communities.

[19]Nancy K. Diamond. (2013) Readiness to Engage: Stakeholder Experiences for Redd+: Forest Carbon, Markets and Communities (FCMC) Program. USAID

[20]https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3

5.3.3 Grievance Redress Mechanisms

A grievance redress mechanism is a process for receiving, recording and facilitating resolution of queries and grievances from affected communities or stakeholders related to REDD+ activities, policies or programs at the level of the community or country.[21] A national feedback and grievance redress mechanism (GRM) needs to be effectively available, and if necessary, strengthened, as part of the country's REDD+ institutional arrangements in order to facilitate handling of any request for feedback, grievance or complaint by any REDD+ stakeholder, with particular attention to providing access to geographically, culturally or economically isolated or excluded groups.[22]

Redress Mechanisms (GRMs) can aid REDD+ countries accomplish several objectives in both the Readiness and Implementation phases through:

➲ **Identifying and resolving implementation problems in a timely and cost-effective manner**:

As early warning systems, well-functioning GRMs help identify and address potential problems before they escalate, avoiding more expensive and time-consuming disputes.

➲ **Identifying systemic issues:** Information from GRM cases may highlight recurring, increasingly frequent or escalating grievances, helping to identify underlying systemic issues related to implementation capacity and processes that need to be addressed.

➲ **Promoting learning as an input to review/ adjustment of the REDD+** programme/intervention

➲ **Improving REDD+ outcomes:** Through timely resolution of issues and problems, GRMs can contribute to timely achievement of REDD+ objectives.

➲ **Helping win the trust and confidence of community members on REDD+** project/ programmes and creates productive relationships between the parties involved.

➲ **Promoting equitable and fair distribution** of benefits, costs, and risks.

➲ **Promoting accountability in REDD+ countries:** Effective GRMs promote greater accountability to stakeholders, positively affecting both specific activities and overall REDD+ governance.[23] GRMs should be accessible, legitimate, predictable, transparent, efficient, and effective in resolving concerns through dialogue, joint factfinding, negotiation, and problem solving. GRM good practice requires accurate documentation of cases using an electronic database to ensure public accountability, organizational learning, and resource planning.[24]

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[21] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3

[22] FCPF FMT Note on Enhancing Capacity for Dispute Resolution (February 20, 2012) and FCPF/UN-REDD Programme Readiness Preparation Proposal Template with Guidance (Version 6 from April 20, 2012)

[23] FCPF/UN-REDD Programme, Guidance Note for REDD+ Countries: Establishing and Strengthening Grievance Redress Mechanisms, June 2015

[24] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3 International Finance Corporation (IFC). 2009. Addressing Grievances from Project-Affected Communities – Guidance for Projects and Companies on Designing Grievance Mechanisms. Good Practice Note. Washington, DC. Available at: www.ifc.org

5.3.4 Benefits of the Grievance Redress Mechanism for REDD+

Grievance mechanisms offer REDD+ project holders and communities an alternative to dispute resolution. Disputes can arise during REDD+ project implementation and may include disputes among forest user groups, disputes between forest user groups and project implementers, and disputes with regulatory agencies among others. The advantage of a grievance mechanism created in collaboration with a community is that it provides a locally based and advantageous means of resolving disputes within the parameters of the two sides' agreement. The process should provide for independent arbitration and the use of legal or administrative remedies in the event that negotiations fail.

The International Finance Corporation (IFC) outlines five key Principles in Designing a Grievance Process[25] which include:

i. **Proportionality:** Scaled to risk and adverse impact on affected communities .

ii. **Cultural Appropriateness:** Designed taking into account culturally appropriate ways of handling community concerns.

iii. **Accessibility:** Clear and understandable mechanism that is accessible to all segments of the affected communities at no cost.

iv. **Transparency and Accountability** for all stakeholders

v. **Appropriate Protection:** A mechanism that prevents retribution and does not impede access to other remedies.

The Grievance Mechanism entails the following 5 steps:

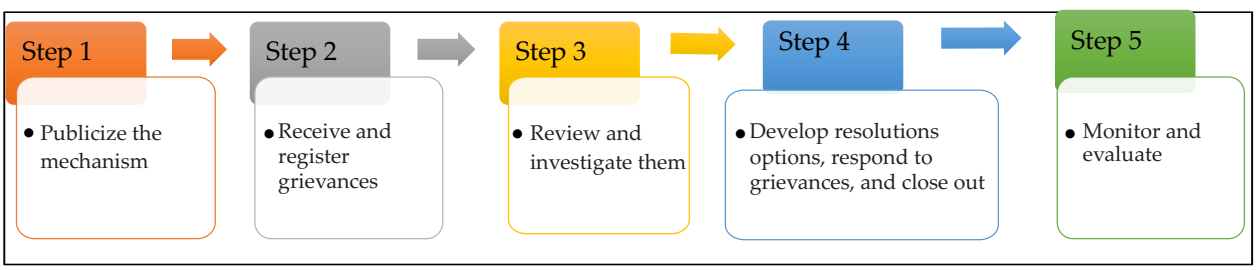

Figure 5.2: Steps for Grievance Mechanisms in REDD+

[25]International Finance Corporation (IFC). 2009. Addressing Grievances from Project-Affected Communities – Guidance for Projects and Companies on Designing Grievance Mechanisms. Good Practice Note. Washington, DC. Available at: www.ifc.org

Exercise 5.4

1. What are the principles of designing a grievance mechanism in REDD+?
2. How does one conduct a grievance process in REDD+?
3. What are the benefits of grievance mechanisms in REDD+?

5.3.5 Gender Responsive Approaches

The dependence of various stakeholders on the forest resources for their livelihoods and other daily needs, poses potential risks associated with the faulty design and weak implementation of REDD+ activities. There are proposed different sets of social and environmental safeguards, to prevent potential social and/or environmental damage or harm to such forest dependent communities and increase benefits for them in an equitable manner. Inclusion of women and men equally and recognition of gendered differences in use and knowledge of forests is critical for REDD+. [26] Women's key skills and knowledge in forest use and knowledge in forest conservation and management can add value to and enhance the efficiency and efficacy of REDD+ action. Remedies to systemic discrimination related to land access, ownership and control as well as decision-making at the household, community and state levels, REDD+ programmes have prioritized mainstreaming gender responsive REDD+ strategy to progressively change structural inequities that deny women and other marginalized groups (such as indigenous communities) land and forest tenure.[27]

Progress has been made in promoting social inclusion within REDD+ initiatives, including by integrating gender equality and women's empowerment principles into national REDD+ strategies.

Efforts towards gender-responsive REDD+ at the national and local levels should be continuous and context-based.

Key requirements of a gender responsive approach include:[28]

- Gender-responsive strategy that is more about achieving equality and empowerment vs. gender sensitive.
- Explicit requirement for a gender action plan that is updated as necessary, with requirements at the project inception, implementation, monitoring and reporting stages.
- Explicitly addresses the risks of sexual and gender-based violence, exploitation, discrimination, and abuse.
- Recognizes that women and people of diverse sexual orientations and gender identities.
- Conduct a Gender and Social Inclusion Assessment to collect baseline data.
- Implement the Gender Action Plan that measures outcomes of activities on women and men, including impacts of activities on women and men's resilience to climate change.
- Ensure the grievance redress mechanisms are accessible to women.

[26] Ibid
[27] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3
[28] Ibid

5.3.6 Access Restrictions

REDD+ activities can lead to restriction of access to resources that a community relied on or use resulting in loss of livelihood, culture, identity, social cohesion, spiritual practice among others that depend on access to natural resources.[29] It can also include loss of communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, fresh water, medicinal plants, hunting and gathering grounds and grazing and cropping areas.[30] Restrictions on land use also refers to limitations or prohibitions on the use of agricultural, residential, commercial or other land that is directly introduced and put into effect as part of the project.

Human rights and rights-based approaches have influenced international climate change debates and decision-making including REDD+ which largely, depends on the willingness of local communities to engage in forest protection.[31] Project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement.[32]

Key elements for addressing access restrictions include;

- Exclusion of any forced evictions, process. framework to avoid or minimize economic displacement.
- Extension of safeguard to customary rights.
- Development of a resettlement action plan.
- Restoration of any loss through meaningful consultation and for IPs, FPIC.

5.4 REDD+ Safeguards Information System

5.4.1 What is a Safeguard Information System?

UNFCCC requires countries engaging in REDD+ activities to develop a 'system for providing information on how the Cancun safeguards are being addressed and respected throughout the implementation of REDD+ activities (UNFCCC Decision 1/CP.16, paragraph 71d[33]) commonly known as the safeguards information system (SIS). UN-REDD defines SIS as a combination of existing systems and sources of information, together with new systems or information to fill gaps as needed, on how all of the Cancun safeguards are addressed and respected throughout the implementation of REDD+ activities.[34] It is also defined as a tool or database that collects and/or provides country-level information on how safeguards are being addressed

[29] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3
[30] World Bank ESF-ESS1, Para 4(f).
[31] Caney, S. Climate change, human rights and moral thresholds. In Human rights and Climate Change; Humphreys, S., Ed.; Cambridge University Press: Cambridge, UK, 2010
[32] World Bank ESF – ESS5
[33] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf
[34] https://www.un-redd.org/glossary/safeguard-information-system-sis

and respected by forest carbon projects. Generally, it is understood to be a domestic institutional arrangement, and often a technological solution that builds on existing national information systems and sources. A SIS contains the objectives of the SIS, sources of information, the responsible entities, and potential sources of information among others, as summarized in **Figure 5.3.**

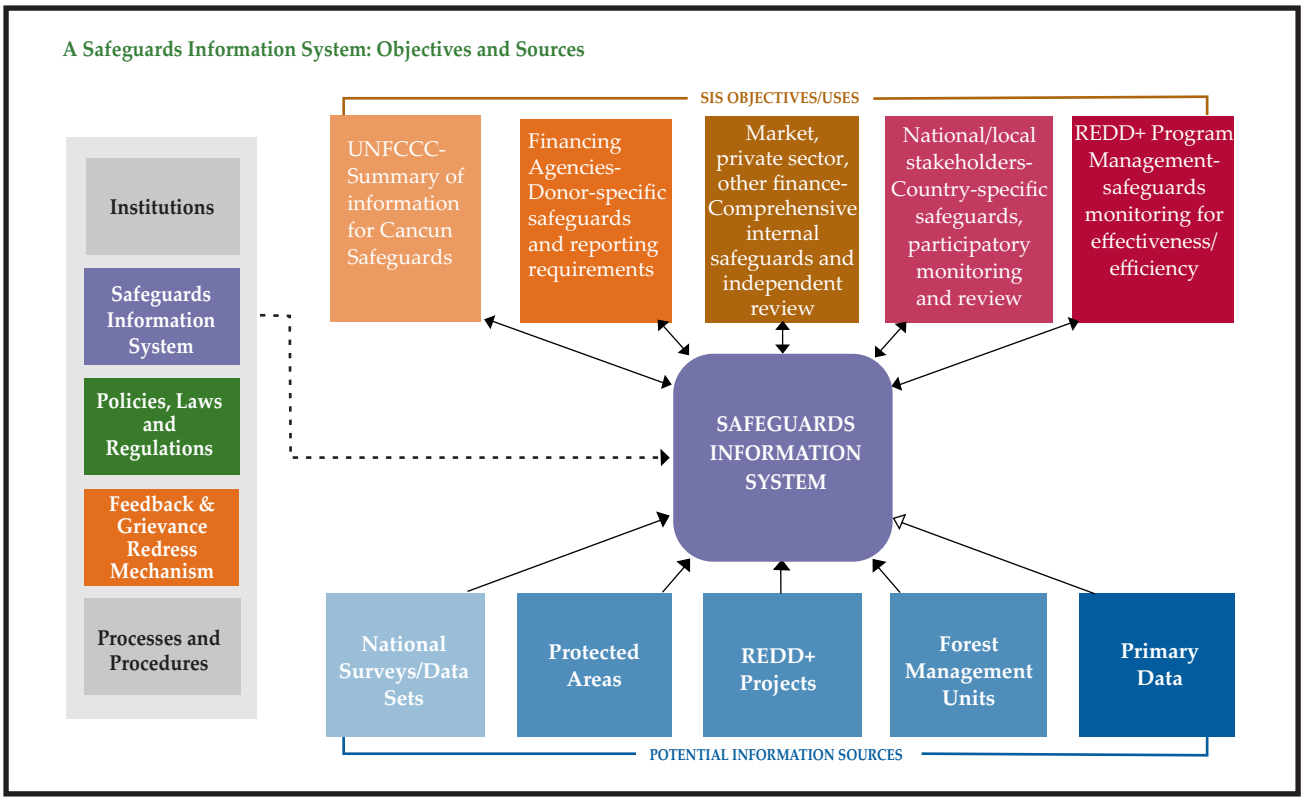

Figure 5.4: Safeguard Information System: Objectives and Sources[35]

[35] https://www.un-redd.org/glossary/safeguard-information-system-sis

5.4.2 Characteristics of a Safeguard Information System

General characteristics for safeguards information systems have been agreed under UNFCCC decision 12/CP.17, paragraph 2[36], according to which the system should be created as illustrated in Figure **5.4:**

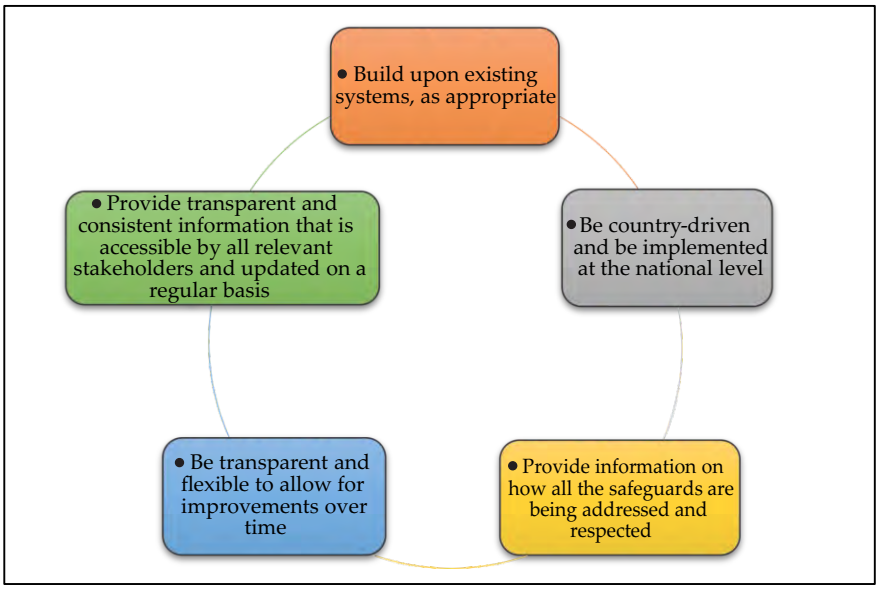

Figure 5.5: Characteristics of A SIS

Additionally, the development of a SIS should consider the following:

- Design features which are country-specific, rather than generic when an SIS is built on information systems and sources already in place in a country.
- Developing an SIS iteratively and adaptively also allows for the incorporation of lessons learned from operating previous versions of the system.
- An initial SIS design may make use of information that is readily available, or most relevant to the early stages of REDD+ implementation, and expand content or improve functionality at later stages.

5.4.3 Contents of Safeguard Information System

- Summaries of information are country reports on the ways in which the Cancun safeguards are being addressed and respected within the context of a national REDD+ implementation.
- A Summary of information is one of the three key safeguards requirements that countries need to meet under the UNFCCC to access Results Based Payments (RBPs).
- They should be submitted to the UNFCCC via National Communications (or, voluntarily, directly to the UNFCCC REDD+ Web Platform) stating when REDD+ activities are first implemented.

[36] https://unfccc.int/decisions?f%5B0%5D=body%3A1343&f%5B1%5D=conference%3A3461

- Guidance on ensuring transparency, consistency, comprehensiveness, and effectiveness when informing how the Cancun safeguards are being addressed and respected through the content of summaries of information has subsequently been documented.[37]

Countries should provide information on which REDD+ activity or activities are included in the summary of information and are strongly encouraged to include the following elements, where appropriate:

a) Information on national circumstances relevant to addressing and respecting the safeguards.
b) A description of each safeguard by national circumstances.
c) A description of existing systems and processes relevant to addressing and respecting safeguards, including the SIS, following national circumstances.
d) Information on how each of the safeguards has been addressed and respected, per national circumstances.
e) Information on REDD+ activity or activities in question.

Application of Cancun Safeguards in REDD+[38] in **Box 5.1** below:

BOX 5.1: THE CANCUN SAFEGUARDS

When undertaking REDD+ activities, the following safeguards should be promoted and supported:

A. That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements.

B. National Forest governance structures are transparent and effective, taking into account national legislation and sovereignty.

C. Respect for the knowledge and rights of Indigenous Peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.

D. The full and effective participation of relevant stakeholders, in particular Indigenous Peoples and local communities.

E. That actions are consistent with the conservation of natural forests and biological diversity, ensuring that [REDD+] actions are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.

F. Actions to address the risks of reversals.

G. Actions to reduce displacement of emissions.

[37] https://redd.unfccc.int/documents/index.php?file=4838_3_png_sis_framework.pdf
[38] https://www.conservation.org/docs/default-source/publication-pdfs/redd-best-practice-safeguards-literature-review.pdf?Status=Master&sfvrsn=315867b5_3

The Cancun Safeguards adopted by COP 16, form the foundational basis for environmental and social frameworks for REDD+. All Standards including independent ones, such as ART TREES **(refer to Module 3),** apply the Cancun Safeguards as the basis for further elaborating their requirements for safeguards.[39] World Bank's Forest Carbon Partnership Facility (FCPF)[40] supports REDD+ ER programs that meet the World Bank social and environmental safeguards[41] (now the Environmental and Social Framework, ESF), promotes and supports the safeguards included in UNFCCC guidance related to REDD+, and provides information on how these safeguards are addressed and respected, including through the application of appropriate grievance mechanisms.[42] Additionally, requirements under ART TREES (Architecture for REDD+ Transactions - REDD+ Environmental Excellence Standard) stipulate compliance with all the seven Cancun Safeguards **(refer to Module 2)**[43]. Also, the environmental and social requirements of the Green Climate Fund (GCF)[44] require consistence with all relevant REDD+ decisions and existing highest standards for the operationalization of its decisions.[45]

It requires that an accredited entity/project developer, in collaboration with the host country(ies), prepare an environmental and social assessment (SESA) report describing the extent to which the measures undertaken to identify, assess, and manage environmental and social risks and impacts, in REDD+ proposal, are consistent with the requirements of GCF ESS (Environmental and Social Safeguards) standards[46]. Jurisdictional and Nested REDD+ (JNR) framework focuses on compliance to all UNFCCC decisions on safeguards for REDD+ and any relevant jurisdictional (national and subnational) REDD+ safeguards requirements must be complied with and it should describe how it meets these requirements[47].

REDD+ Social & Environmental Standards (SES) principles, criteria and framework for indicators break down the Cancun safeguards into key constituent elements, with special attention to best practice related to among others; the rights of Indigenous Peoples and local communities including free, prior, and informed consent, effective participation of women and vulnerable and marginalized groups, equitable benefit sharing, and enhancing biodiversity and ecosystem services priorities as illustrated in **Figure 5**. [48]The standard can be used to support a country's interpretation of safeguards, helping to identify the important constituent elements for the country context.

[39]UNFCCC. 2011. The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperation Under the Convention. Decision 1/CP.16. Report of the Conference of the Parties on its Sixteenth Session, Cancun, 29 November–10 December 2010. FCC/CP/2010/7 Add.1. Bonn, Germany: United Nations Framework Convention on Climate Change

[40]Relevant information on the REDD+ FCPF safeguards: https://www.forestcarbonpartnership.org/safeguards

[41]This was updated to the Environmental and Social Framework that was approved in August 2016. Work is underway to align the FCPF to the framework.

[42]The FCPF has also provided complementary guidance, such as the Carbon Fund Methodological Framework among others, to guide the design of for ER Programs with respect to UNFCCC safeguard criteria and indicators. https://www.forestcarbonpartnership.org/system/files/documents/FMT%20Note%20CF-20133_FCPF%20WB%20Safeguard%20Policies%20and%20UNFCCC%20REDD%2B%20Safeguards_FINAL_0.pdf

[43]Architecture for REDD+ Transactions (ART) Program TREES ENVIRONMENTAL, SOCIAL, AND GOVERNANCE SAFEGUARDS DOCUMENT, August 2020. https://www.artredd.org/wp-content/uploads/2020/08/TREES-ESGSafeguards-Guidance-Document.pdf

[44]https://www.greenclimate.fund/projects/safeguards/ess

[45]Decision 1/CP.16.

[46]Ibid

[47]https://verra.org/wp-content/uploads/2021/04/JNR_Validation_and_Verification_Process_v4.0.pdf

[48]https://www.redd-standards.org/index.php?option=com_content&view=article&id=77&Itemid=122

REDD+SES PRINCIPLES

1. Recognizes and respects rights to lands, territories and resources.
2. The benefits are shared equitably among all relevant stakeholders.
3. Improves long-term livelihood security and well -being of Indigenous Peoples and local communities, women and the most marginalized and/or vulnerable.
4. Contributes to good governance, to broader sustainable development and to social justice.
5. Maintains and enhances biodiversity and ecosystem services.
6. All relevant rights holders and stakeholders participate fully in the REDD+ program.
7. Complies with applicable local and national laws and international treaties, conventions and other instruments.

Figure 5.4: REDD+ SES Principles[49]

Exercise 5.4

1. What is Safeguard Information System (SIS) in REDD+?
2. What are the characteristics of SIS?
3. What are the principles of REDD+ SES?
4. Safeguards Information System is not necessary in REDD+ implementation True / False

5.5 Incorporation of REDD+ Safeguards

We have analyzed the safeguards and how they can be applied in mitigating social and environmental risks associated with REDD+ implementation. Some of the safeguards can be easily operationalized while others may pose some challenges, especially in countries that have no accommodative laws related to forest governance, tenure, rights, and other safeguard-related issues. This calls for the need for a country approach to safeguards. This session looks at how countries can implement safeguards guided by their country-specific conditions/circumstances.

5.5.1 What is Country Approach to Safeguards (CAS)

Parties to the UNFCCC that intend to implement REDD+ activities are encouraged to have in place country approaches to REDD+ safeguards. The country approach to safeguards refers to an approach that a country adopts based on its own unique needs and circumstances to meet REDD+ safeguards.

Country Approach to Safeguards (CAS) interprets the Cancun safeguards, and other safeguards applicable to REDD+ interventions (e.g., through financing sources or carbon standards),

[49]CI Psamsom Presentation on REDD+, 2022

to determine how they can be addressed and respected within the governance framework. Country approaches are characterized by the identification, application, and improvement of existing governance arrangements for REDD+ to meet the Cancun Safeguards and other different safeguards requirements a country may choose to adopt.

Components of a country's approach to safeguards include three core elements as illustrated in **Figure 5-6**;

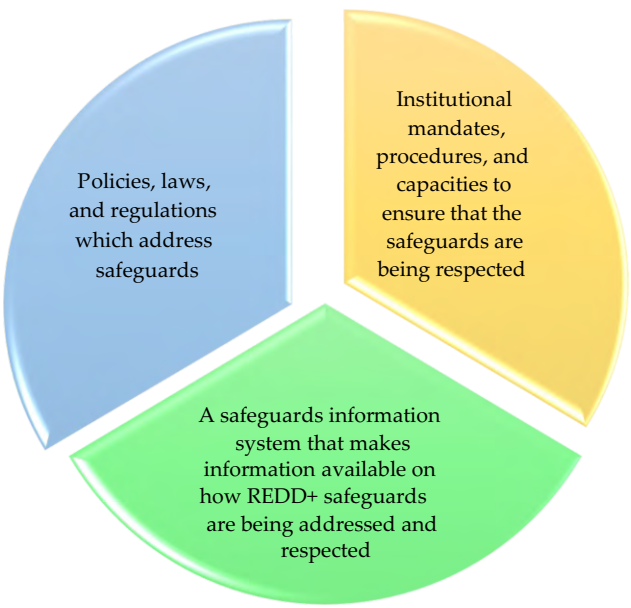

Figure 5.6: Components of Country's Approach to Safeguards

5.5.2 Benefits of A Country Approach to Safeguards

A country's Approach to Safeguards has the following advantages[50]

➲ Helps nations in operationalizing the UNFCCC REDD+ safeguards, which aim to reduce social and environmental risks and maximize REDD+ benefits, as well as in meeting the safeguards requirements to be eligible for results-based payments (RBPs).

➲ Helps nations in determining the Cancun safeguards' significance in their own national context and which benefits and risks pertain more to the REDD+ PAMs planned under their changing NS/AP.

➲ Help countries to determine the safeguards goals that they wish to achieve, taking into consideration existing national policies and international commitments.

➲ Contribute to the design of more sustainable REDD+ PAMs, by taking into account wider socio-economic and environmental concerns that can help address the underlying drivers of deforestation and forest degradation.

➲ Strengthen country ownership and ensure that the safeguards goals are appropriate to national circumstances and contribute to national sustainable development and green growth goals.

➲ Increase the legitimacy of, REDD+ by demonstrating a commitment to treating safeguards in a comprehensive yet context-specific manner.

➲ It can serve as a cost-effective means to help countries achieve and keep track of long-term governance improvements, as it builds.

[50] https://snv.org/assets/explore/download/redd_clsg_final_9.10.14.pdf

upon the existing governance arrangements (policies, institutions, and information systems) of a country to address and respect REDD+ safeguards, rather than develop entirely new ones.

➲ It can provide countries with the flexibility to explore applying the safeguards not just within the forestry sector, but also in other land-use sectors relevant to REDD+, such as agriculture and energy.

5.5.3 How to Develop a Country's Approach to Safeguards

Each country approach will be different and reflect the specificities of national contexts as well as what the country defines as the overall goals and scope of safeguards application as there is no blueprint. However, drawing on practical experiences over the past five years, some generic steps that may be useful for countries planning to develop their country approach to safeguards can be identified. Countries may decide to undertake any number of these steps, in any sequence, depending on their specific context as illustrated in the lesson below and in **Figure 7.**

KENYAN CONTEXT

Safeguards Information System (SIS) to support reporting and accountability on observance of the Country Approach to Safeguards **(CAS).** The SIS primarily is a web portal.

CAS

To determine how to fulfil the Cancun (and other applicable) Safeguards which having been clarified for Kenya's national circumstances and context under the Constitution and applicable Policies, Laws and Regulations (PLRs), can ensure that REDD+ actions and PAMs, contribute to the objectives of the national REDD+ Strategy

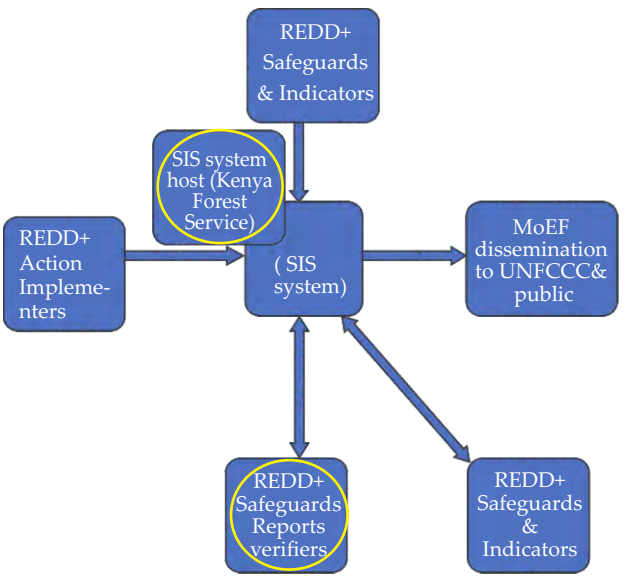

Figure 5.7: Kenya's Country Approach to Safeguards[51]

[51]CI Psamson Presentation on REDD+, 2022

The development of a country's approach to safeguards may benefit from being carried out iteratively, with outputs from one step being used to refine the results of previous steps and inform those that follow.
The steps are as follows:[52]

i. Defining safeguards goals and scope of the CAS:
In this context, defining safeguards goals refers to which safeguard framework(s) the country seeks to adopt and apply to REDD+ and whether the country chooses to develop and/or include safeguards beyond those of the UNFCCC. The requirements around the Cancun safeguards are basic preconditions to be eligible for RBPs under the UNFCCC, but a country may also want to consider other bi- and/or multi-lateral safeguards requirements, e.g., World Bank Operational Policies, as part of the FCPF Carbon Fund, per national and international policy and funding commitments and priorities (**Refer to Module 3**). Consideration may be given to safeguards requirements and expectations of investors in REDD+ results-based actions, as well as buyers of verified emissions reductions/ enhanced removals. Defining safeguards goals could additionally mean considering what national policies could benefit from addressing and respecting REDD+ safeguards.

ii. Addressing safeguards:
A coherent body of PLRs, and associated institutional arrangements, are in place that deals with the potential benefits and risks associated with REDD+ PAMs, and in doing so, enable the application of the Cancun safeguards in the country context and to meet country safeguards goals.

iii. Respecting safeguards:
Respecting safeguards means ensuring the effective application of relevant PLRs, through associated institutional capacities, such that they are implemented in practice and effect real and positive outcomes on the ground.

iv.Stakeholder Engagement:
Engaging stakeholders and facilitating their informed participation in REDD+ processes - is essential for developing inclusive and transparent country approaches to safeguards. The success of a country's approach to safeguards and its resulting products will to a large extent, depend on stakeholder engagement and ownership across a wide range of constituencies, particularly national and subnational government, private sector, civil society, and women, men, and youth of indigenous peoples and local communities (**refer to Module 6 and 7**).

v. Safeguard information systems and summaries of safeguards information:
Safeguard Information Systems are tools for collecting, storing, and managing information on the safeguards that are being implemented in REDD+ activities and summaries of safeguards is a document that provides an overview of the safeguards that are applied to a particular REDD+ activity. Key elements and expected outputs of a country's approach to safeguards include the development of a safeguards information system and summaries of safeguards information, both of which are requirements for countries under the UNFCCC.

[52]https://redd.unfccc.int/uploads/2234_5_cas-paper.pdf

The UN-REDD Programme has developed a pair of tools that can support the development of country approaches to safeguards:

Country Approach to Safeguards Tool (CAST)

It was designed to support planning at the country level for activities related to REDD+ safeguards and SIS. CAST is an Excel-based, flexible, and process-oriented tool, designed to help countries to:

- Make an informed assessment of /plan for the development and application of their country's approach to safeguards.
- Identify, prioritize, and sequence relevant steps in a country approach.
- Identify available information resources.
- Clarify how the processes under various safeguards initiatives correspond. CAST can be used at any stage of safeguards planning.

Benefits and Risks Tool (BeRT)

BeRT – and its accompanying workshop facilitator's kit – is designed to help countries to:

- Identify benefits and risks associated with REDD+ PAMs, in the context of the Cancun safeguards.
- Determine how the country's existing PLRs already address the risks or promote the benefits identified.
- Identify gaps in the PLR framework that may need to be addressed to respond to and respect the Cancun safeguards in REDD+ implementation.
- Utilize information on the benefits and risks of specific REDD+ PAMs/options to inform decisions on which PAMs to include in the REDD+ NS/AP.
- Provide content for use in the summary of information on how countries are addressing and respecting the safeguards through existing PLRs.

Exercise 5.5

1. What is a country approach to safeguards?
2. What are the benefits for a country approach to safeguards?
3. What are the steps to follow in developing a country approach safeguard?
4. What are the tools used in developing a country approach safeguard?

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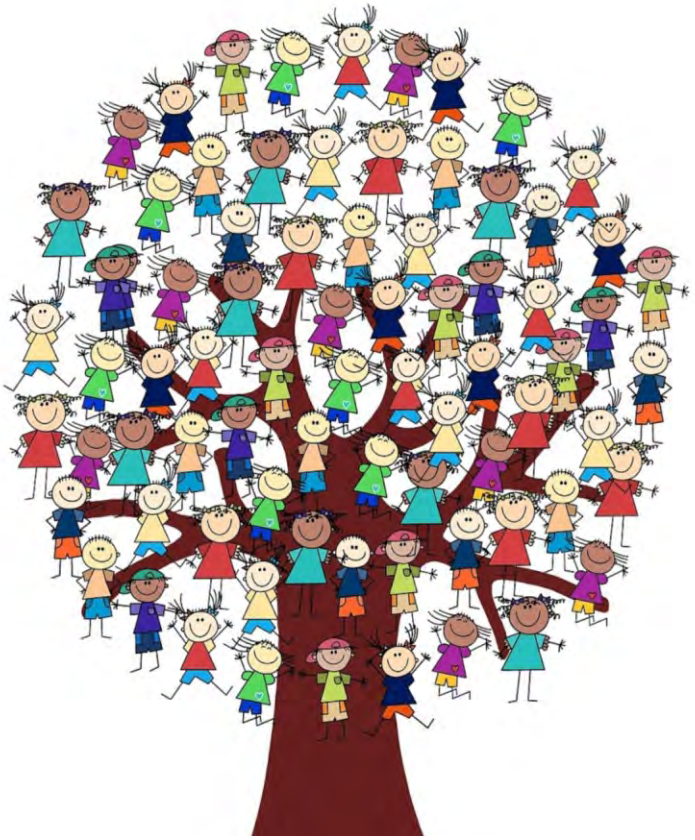

Module 6: Gender and Social Inclusion in REDD+

CONSERVATION INTERNATIONAL

Module 6: Gender and Social Inclusion in REDD+

6. Module Overview

This module covers gender and social inclusion in REDD+, the role of gender in forest and climate change, approaches to gender and social inclusion and finally the policy frameworks for gender and social inclusion in REDD+.

Learning Objectives and Outcomes

Learning Objectives

- **Objective 1:** Understand the basics of gender and social inclusion in REDD+ implementation.
- **Objective 2:** Discuss the GESI approach in REDD+ project implementation.
- **Objective 3:** Understand the importance of gender and social inclusion in REDD+ projects implementation.

Learning Outcomes

1. Be able to explain basics of gender and social inclusion in REDD+ implementation.
2. Be able to explain GESI in REDD+ project implementation and its importance.
3. Be able to demonstrate understanding of gender and social inclusion in REDD+ projects.

Lesson Outline

Module 6: Gender and Social Inclusion in REDD+

Understanding of Gender and Social Inclusion

The importance of gender and social inclusion considerations in REDD+ policy design and programme implementation acknowledge that REDD+ initiatives recognize gender differentiated roles in forest management to ensure effective and inclusive policies and regulations are being implemented. Women are viewed as a primary users of forest resources in REDD+ thus it sees that the gender specific roles, rights and responsibilities as well as men, women's specific use and knowledge of forests, shape their experiences differently.[1]

There are key terminologies that we need to learn so as to enable us understand the various aspects of gender and social inclusion and its importance in REDD+ implementation.

They are:

Gender refers to the socially constructed roles and responsibilities ascribed to men and women and the relationship between them.[2] It may as well be referred to as the economic, social and cultural attributes and opportunities associated with being male or female.

Gender equality: occurs when men and women are attributed equal social value, equal rights, and equal responsibilities and have equal access to the means (resources, opportunities) to exercise them.

Gender Equity: Gender equity is the process of being fair to women and men.[3]

"Gender intervention" or ("affirmative action"): specific measures put into place to compensate for historical, social, political or economic disadvantages that prevent women and other vulnerable groups from operating on an equal footing.[4]

Gender Stereotypes: is a generalized view or preconception about attributes, or characteristics that are or ought to be possessed by women and men or the roles that are or should be performed by men and women. Gender stereotypes can be both positive and negative for example, "women are nurturing" or "women are weak". [5]

Gender mainstreaming: Systematic approach of assessing and integrating the implications for women and men of any planned action, as well as the inclusion of specific provisions for gender.

Gender-sensitive: In practice, gender sensitivity entails differentiating between the capacities, needs, and priorities of women and men; ensuring that the views and ideas of both women and men are taken seriously; considering the implications of decisions on the situation of women relative to men; and taking action to address inequalities or imbalances between women and men. In practice, using a gender-sensitive approach has come to mean 'do no harm'.[6]

Gender-responsive: In practice, using a gender-responsive approach entails attempting to redefine women's and men's gender roles and relations and proactively and intentionally contributing to the advancement of gender equality. More than 'doing no harm', a gender-responsive policy, program, plan, or project aims to 'do better'.[7]

[1]The Business Case for Mainstreaming Gender in REDD+. UN-REDD Programme
[2]https://www.who.int/health-topics/gender#tab=tab_1
[3]United Nations Population Fund. https://www.unfpa.org/resources/frequently-asked-questions-about-gender-equality
[4]Ibid
[5]United Nations Human Rights Commission 2014. https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/OnePagers/Gender_stereotyping.pdf
[6]UN Women's Glossary of terms, available at: http://bit.ly/1TiNHKZ;
[7]UN Women's Glossary of terms, op. cit., and Aguilar, L., Granat, M., & Owren, C., op. cit.

Intersex: a person who is conceived and born with a biological sex characteristic that cannot be exclusively categorized in the common binary of female or male. The challenge in binary categorization is due to their inherent and mixed anatomical, hormonal, gonadal (ovaries and testes), or chromosomal (X and Y) patterns, which could be apparent before, at birth, in childhood, puberty, or adulthood.

Marginalized Group: A group of people who, because of laws or practices before, on, or after the effective date, were or are disadvantaged by discrimination on one or more of the grounds in Article 27 (4) of the Constitution.

Persons with Disability: Any person with any physical, sensory, mental, psychological, or other impairment, condition, or illness that has, or is perceived by significant sectors of the community to have a substantial or long-term effect on an individual's ability to carry out ordinary day to day activities.

Rights-Based Approaches: Recognize that society has an obligation to meet the basic human rights of all citizens including men, women, children, and those with disabilities regardless of their ethnicity, age, social standing, income, religion, sexual orientation, political affinity, etc.

Social Inclusion: Process of improving the terms on which individuals and groups take part in society including improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity.

6.1 Role of Gender and Social Inclusion in Forests and Climate Change

Gender dynamics ensure effective participation of men and women, gender concerns are must be well recognized in REDD+ phases. Overall low levels of women's participation in decision making and representation, gender differentiated roles and responsibilities and rights and opportunities, differential impacts and outcomes of access to and control over forest resources is important in REDD+. [8]The importance of gender and social inclusion in REDD+ can relate to increased efficiency and efficacy and increase sustainability which implies that both men and women are equally able to benefit and be empowered with recognized rights and responsibilities as a primary users of forest resources.[9]

The UN Research Institute for Social Development (UNRISD) outlines a vision of an inclusive society as a "society for all" in which every individual, each with rights and responsibilities, has an active role to play. This document highlights that the concept of social inclusion has been expanded beyond just providing a platform for excluded ones to express their voices; rather, social inclusion requires empowering and capacitating women, men, and various social groups, so that they all can identify their common concerns and challenges, tackle them and further participate in and lead development processes.[10]

Both women and men are key agents of change whose unique but often differentiated knowledge, skills, and experience are central to economic

[8]http://www.un-redd.org/single-post/2016/01/22/Pioneers-of-social-inclusion-in-REDD
[9]Ibid
[10]Social inclusion and the post-2015 sustainable development agenda

development as well as environmental sustainability. [11]However, studies show that gender and social inclusion challenges in forest management include:

➲ **Lack of awareness:** Women and marginalized groups are often unaware of their rights and opportunities in forest management.

➲ **Discrimination:** Women and marginalized groups are often discriminated against in forest management, for example, by being excluded from decision-making processes or being denied access to resources.[12]

➲ **Violence:** Women and marginalized groups are often at risk of violence in forest management, for example, by being harassed or assaulted.

➲ **Lack of resources:** Women and marginalized groups often lack the resources they need to participate in forest management, for example, by not having access to education and training.

➲ **Lack of representation:** Women and marginalized groups are often underrepresented in forest management, for example, by not being represented in decision-making bodies.[13]

In the text box below[14], the gender and social inclusion challenges in REDD+ are highlighted

Box 6.1: Gender and Social Inclusion Statistics in REDD+

- 129 million hectares of forest - equivalent in size to South Africa - have been cleared in the last 25 years. Deforestation deprives of poor communities of their livelihood resources.
- Almost 75 per cent of the world's poor are affected directly by land degradation.
- Study in 20 REDD+ sites in 6 countries found that women have been less informed and less involved in the design and decision-making related to REDD+ .
- With limited land ownership and control over productive resources, women, relative to men, may not have strong incentive to engage in tree planting. Studies (e.g., Ethiopia) show that land certification significantly increases productivity on plots farmed by women.
- 90 percent of Africa's rural land is currently undocumented, leaving rural communities vulnerable to land-grabbing. Land grabs have been shown to adversely affect rural livelihoods, especially women.
- Since 1980, Brazil has approved more than 300 territories where indigenous peoples have the right to use their forests for their own needs, wherein it is safe from external outside pressures (e.g., soy farmers, ranchers, gold miners, etc.).
- Study in India shows that women's participation in forest projects is associated with a 28 percent greater probability of forest regeneration.
- Countries with higher female representation in parliament are more likely to safeguard protected land areas.

[11]McKinsey Global Institute (MGI), 'The Power of Parity: How Advancing Women's Equality Can Add $12 Trillion to Global Growth', McKinsey & Company, September 2015.
[12]Ibid
[13]http://www.un-redd.org/single-post/2016/01/22/Pioneers-of-social-inclusion-in-REDD
[14]Larson et al. (2015); Forest Trends (2015); Bernier et al. (2013); Bezabih et al. (2012); Agrawal et al. (2006); UNDP (2011); UNEP (2016); Oxfam, ILC, RRI (2016) ; UN (2016

In the context of climate change, gender and social inclusion are important because women and men are often affected differently by climate change. For example, women are more likely to be displaced by climate-related disasters, and they may have less access to resources such as food, water, and healthcare.[15] Vulnerable groups, such as women, indigenous peoples, and people living with disabilities, are often disproportionately affected by climate change. Climate action through REDD+ can have a positive impact on gender equality and social inclusion where it can create jobs for women, and it can help to improve access to resources for vulnerable groups in the climate change adaptation measures.[16]

6.2 Approaches to Gender and Social Inclusion

6.2.1 Gender Equality and Social Inclusion

Gender Equity and Social Inclusion (GESI) is a concept that addresses improving access to livelihood assets and services for **ALL**, including the women, the poor, and marginalized and supports more inclusive policies and mindsets which increases the voice and influence of all including the women, poor, and marginalized.[17] GESI interventions are designed to "level the playing field" and correct existing inequities. In **addition to women,** other **groups of people** are also vulnerable and often excluded from development opportunities. This can include **children and youth, the elderly, people with disabilities,** those living in remote and under-serviced areas, people without land or title, etc.[18] GESI approach seeks to ensure that all **excluded people** have **equal opportunity** to realize their full potential and to contribute to, and benefit from, development efforts.

Gender sensitive projects are those built on series of activities aimed at bringing about clearly specified objectives and results within a specified time while taking into full account both women's and men's issues.[19] There is a need to consider and value **Gender-differentiated needs**, roles, experiences, and knowledge of the forest in the design and implementation of REDD+ action. Gender needs and Roles also need to be captured, across the policy cycle and within the various REDD+ components (e.g., REDD+ PAMs, safeguards, stakeholder engagement, governance etc. Gender Responsive interventions can help promote REDD+ making it, efficient, effective, and sustainable in policy and in practice. It is therefore clear that there is a continued and pressing need to better integrate gender-responsive activities in a more cohesive and systematic way throughout REDD+.

6.2.2 Principles Guiding Gender Equity and Social Inclusion

a) Gender equality and social inclusion are fundamental human rights and therefore must be at the center of all development efforts.

b) Gender equality and social inclusion are "cross-

[15]World Bank, Rethinking Forest Partnerships and Benefit Sharing: Insights on Factors and Context that Make Collaborative Arrangements Work for Communities and Landowners (Washington, D.C.: World Bank, 2009); FAO, 'Climate-Smart' Agriculture: Policies, Practices and Financing for Food Security, Adaptation and Mitigation (Rome: FAO, 2010).

[16]Setyowati, A., 'How bringing gender perspectives into REDD+ policies could enhance effectiveness and empowerment', Policy Brief, Women Organizing for Change in Agriculture Natural Resource Management, October 2012; and UN-REDD Programme, The business case for mainstreaming gender in REDD+, December 2011.

[17]Draft Background paper, Defining GESI Operational Framework, July 2016, p. 24

[18]GESI in Project Management Workbook – USAID Climate Ready

[19]European Institute for Gender Equality (EIGE). (016). Gender Mainstreaming: Tools and methods. European Union.

cutting" development issues and therefore relevant and important to projects in any sector.

c) GESI-sensitive projects contribute to international, regional, and national development policies, plans, and commitments.

d) Projects that address gender concerns and provide equal opportunities to women and men enjoy more success than those that do not.

6.2.3 Benefits of Gender Equality and Social Inclusion in REDD+

UN-REDD program notes that no forest solution or REDD+ action will succeed unless the diverse forest stakeholders and rightsholders including indigenous peoples and local communities are fully and effectively engaged in defining and implementing policies, partnerships, and financing schemes.

Benefits of GESI mainstreaming **(Figure 6.1)** include:

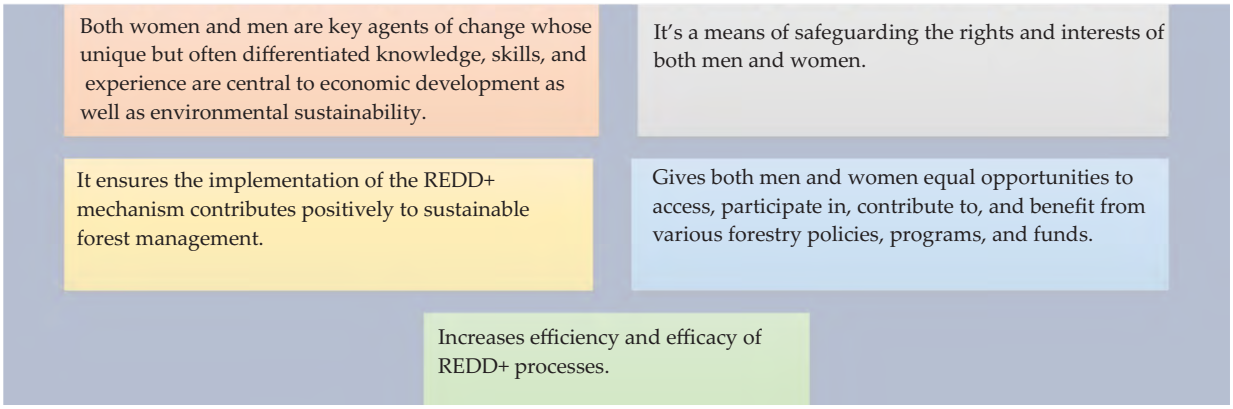

Figure 6.1:Benefits of GESI in REDD+

6.2.4 Mainstreaming GESI in REDD+

REDD+ planning should carefully assess the context or "operational environment" surrounding the project - including gender and social inclusion. To achieve the best results for all project beneficiaries, gender equality, and social inclusion need to be fully integrated or "mainstreamed" throughout the project cycle as summarized in Figure 6-2. The components of GESI in strategy from GEF focuses on attaining Gender and Social Inclusion when applied.

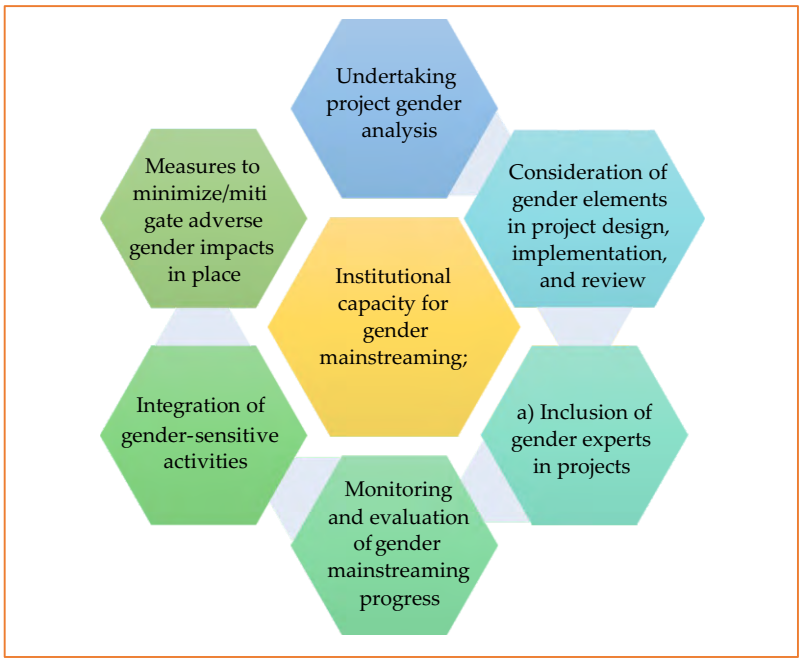

Figure 6.2: Components of GESI Strategy by GEF[20]

6.2.5 Challenges in Mainstreaming Gender and Social Inclusion in REDD+

The process of mainstreaming GESI is hampered in the context of REDD+ implementation as follows:

➲ Gender disparities in land and resource access due to socio-cultural norms and practices.

➲ Misconceptions about gender advocacy (e.g., it may undermine men's positions or power).

➲ Inadequate knowledge and capacity, prevent women from participating meaningfully in decision-making at all levels.

➲ Access to employment opportunities where employment opportunities seek to assess the employability of women, youth, people with disability (PWDs) and men.

➲ Gender Based Violence(GBV) and insecurity where reported cases of human and wildlife conflicts affecting men and women as well as wildlife attacks on livestock.

➲ Equality and equity in benefit sharing/use on forest resources which tend to favor men than women on access and management.

➲ Cultural and social, attitudes, perceptions and traditional where cultural and social attitudes seek to address barriers that hinder equal and meaningful participation.

[20]UN-REDD Programme 2017

6.2.6 Risks of not mainstreaming Gender and Social inclusion[21]

Some of the risks include:

i. Inaccurately identifying the primary stakeholders of forests and forest management; Women are considered as primary stakeholders.

ii. Setting up an inequitable system for sharing of benefits; by not integrating GESI. some categories of stakeholders may be disproportionally affected in decision making, benefit sharing, as well as on the issue of tradeoffs on access, use and management of forest resources.

iii. The risk of perpetuating inequality in land and resource use rights.

iv. The risk of continuing marginalization of women in decision-making.

v. Reduction of the sustainability and effectiveness of REDD+ Outcomes.

Box 6.2: Case Study of GESI in India[22]

In 2006, India enacted the Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act" (or Forest Rights Act (FRA)). The Act was designed to help secure the Rights of the Forest Dwelling Communities and address historical injustices, by reinstating the land and forest rights of forest-dependent communities traditionally living on lands notified as state forests. The FRA created a new rights-based paradigm for forest governance with recognition of two types of forest rights: individual forest rights and community forest rights for both women and men. Both Forest Dwelling Scheduled Tribes (FDST) and Other Traditional Forest Dwellers (OTFD) (some 250 million people living in and around forests) are eligible to submit claims under the FRA. Although the lead agency for implementation is the Ministry of Tribal Affairs, in practice it is undermined by an array of laws, policies and programs implemented by the much more powerful Ministry of Environment, Forests, and Climate Change. The FRA provides equal rights for women over both individual lands and community forest resources, and aims to secure women's representation.

Difficulties in a number of dimensions, however, have been identified in the FRA's gender-equal implementation (Bhalla 2016). The prevailing patriarchal mind-set among state agencies means that women are perceived to be encroachers rather than legitimate title holders (Ramdas 2009; TISS 2018). FDST women are often unaware of the requirements that one-third of Gram Sabha meeting attendance must be by women. They do not know what their role on the FRC is, and do not appreciate the importance of participating in site verification (Working Group of Women and Land Ownership 2018).

In a twist, Bhil women in southern Rajasthan, who were already managing the community-based forest resources in their relatively more egalitarian society, had their authority usurped when the FRC (with only 30% women membership) took control of community forestry resources (Bose 2011). This reversal demonstrates the importance of examining existing forest access and use patterns before mobilizing programs for gender equality.

The case study points to the critical issue of starting from a point of critical understanding of the resource use dynamics and context prior to designing new interventions for GESI mainstreaming. Laws should add value, and strengthen frameworks for Gender inclusion in forest resource management, so as to avoid a scenario like the one in Southern Rajasthan.

[21]Setywati, A 2012

[22]Extracted from https://www.cifor.org/publications/pdf_files/Books/Gender_Equality.pdf

Exercise 6.2

1. How is GESI applicable in REDD+?
2. What are the principles guiding implementation of GESI in REDD+?
3. What are the challenges and risks of not using GESI in REDD+ project implementation?

6.2.7 Importance of GESI in REDD+

As we have seen, gender and social inclusion are important components in REDD+ implementation. The push for gender equality in forest governance has been fronted by many actors ranging from gender activists to civil society groups, local and international NGOs, parliamentarians, donor agencies, and, importantly, from the government's development and policy agenda. Arguments for mainstreaming gender are most frequently predicated on one of two basic elements;

i. Rights-Based Approach (normative approach):
Based on the precept that gender equality rights are human rights and thus ought to be mainstreamed.
A number of declarations, conventions, agreements, and other international instruments inform the human rights basis for a gender perspective in REDD+.
The common understanding of the human rights approach is predicated on three pillars: (1) that the objective of [climate and] development policies and program development is to fulfill human rights; (2) that the approach identifies rights holders and addresses their capacity needs to effectively make their claims, and duty bearers and their capacities to meet their obligations; and (3) that principles and standards derived from international human rights treaties should guide all development cooperation and programming in all sectors and in all phases of the programming process.
The push has been embedded in several policies and laws, both National and international. Global policies and guidelines have played a pivotal role in driving change at the national level. At the global scale, international conventions and declarations relating to women's human rights have inspired the push for gender equality.
This includes Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), which is an international human rights treaty that was adopted by the United Nations General Assembly in 1979. It is the most comprehensive international bill of rights for women and it defines discrimination against women as "any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms."[23]

[23] https://www.ohchr.org/en/treaty-bodies/cedaw/introduction-committee

The 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) that explicitly states the importance of protecting Indigenous women and children from violence and discrimination, the Sustainable Development Goals (SDGs), Goal 5 on Gender Equality includes a target on women's equal "access to ownership and control over land and other forms of property. Target 5a, requires nations to undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws.

ii. Business Case:
Based on the argument that mainstreaming gender into REDD+ can help improve the efficiency, efficacy, and long-term sustainability of REDD+. According to UN-REDD[24] processes that are inclusive, iterative, and support innovation are more likely to generate REDD+ interventions that yield lasting climate change and sustainable development impacts. Engaging women in particular in decision-making is a prudent strategy because it will contribute to the demand-side development of REDD+ interventions. This could result in a greater likelihood of compliance with new and innovative approaches over time, thereby contributing to sustainability.

Exercise 6.3

1. What is the importance of GESI as an approach in REDD+?
2. How does GESI improve gender inclusion in REDD+ projects?
3. What are the components of mainstreaming GESI in REDD+ projects?

6.3 Policy Frameworks for Gender and Social Inclusion in REDD+

There are a number of policy frameworks for gender and social inclusion in REDD+, including:

- **UNFCCC (United Nations Framework Convention on Climate Change) REDD+ Safeguards:**
The UNFCCC REDD+ Safeguards are a set of principles and guidelines that aim to ensure that REDD+ activities are implemented in a way that is socially and environmentally sustainable. The Safeguards include a number of provisions for gender and social inclusion, such as the need to ensure that women and marginalized groups are involved in REDD+ activities and that they benefit from the results of REDD+.

- **World Bank's Forest Carbon Partnership Facility (FCPF):**
FCPF is a global partnership that supports REDD+ activities in developing countries. FCPF has a number of policies and procedures that promote gender and social inclusion in REDD+, such as the requirement that all FCPF-funded projects have a gender action plan.

[24]UNREDD 2011. Business Case for Mainstreaming Gender in REDD+
https://www.undp.org/sites/g/files/zskgke326/files/publications/Low_Res_Bus_Case_Mainstreaming%20Gender_REDD+.pdf

▪ **The REDD+ Readiness Fund (RRF):**
The RRF is a global fund that provides financial support to developing countries to prepare for REDD+. The RRF has a number of policies and procedures that promote gender and social inclusion in REDD+, such as the requirement that all RRF-funded projects have a gender analysis.

▪ **UN Convention on Elimination of All Forms of Discrimination against Women (CEDAW):**
This is an international convention which provides for the rights of all girls and women. It also lists specific areas where discrimination against girls and women must end, like laws, marriage, education, health care, and employment. Article 14 (g) provided for equal access to among others land and recommends agrarian reforms as well as in land settlement schemes.

▪ **Maputo Protocol:**
Article 18(2a) of the Maputo Protocol obliges state parties to take all appropriate measures to "ensure greater participation of women in the planning, management and preservation of the environment and the sustainable use of natural resources at all levels. Article 18 (c) also provides that states shall protect and enable the development of women's indigenous knowledge systems.

Unfortunately, these are just a few of the policy frameworks that exist for gender and social inclusion in REDD+.

6.3.1 Cancun Agreement[25]

➲ The Cancun Agreements, explicitly link gender to climate vulnerability.

➲ Need to engage a broad range of stakeholders at global, regional, national, and local levels, including youth and persons with disability, and gender equality and the effective participation of women and indigenous peoples are important for effective action on all aspects of climate change;" (7/CP.16).

➲ Adaptation actions to follow a country-driven, gender-sensitive, participatory, and fully transparent approach, taking into consideration vulnerable groups, communities, and ecosystems; with a view to integrating adaptation into relevant social, economic and environmental policies and actions, where appropriate;" (12/CP. 16).

➲ "Requests developing country Parties, to address, drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender consideration and the safeguards identified in paragraph 2 of annex 1 to this decision in their action plans. (1 CP/16).

Exercise 6.4

1. What are the policy frameworks supporting gender and social inclusion in REDD+?
2. Why is the Cancun Agreement important in gender and social inclusion in REDD+?
3. What are the principles of Cancun Agreement for gender inclusion in REDD+?

[25] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf

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Module 7: Indigenous Peoples and Local Communities in REDD+

CONSERVATION INTERNATIONAL

Module 7: Indigenous Peoples and Local Communities in REDD+

7. Module Overview

In this module, the focus will be on who Indigenous Peoples and Local Communities are. Their role in the forest ecosystem and policy framework as well as the use of Free Prior Informed Consent (FPIC) as a stakeholder engagement approach is explained.

Learning Objectives and Outcomes

Learning Objectives

- **Objective 1:** Understand the role of Indigenous Peoples and Local Communities in REDD+ projects.
- **Objective 2:** Understand policy frameworks for Indigenous Peoples and Local Communities in REDD+ projects.
- **Objective 3:** Discuss the role of FPIC in stakeholder engagement for REDD+ implementation.

Learning Outcomes

1. Be able to explain why Indigenous Peoples and Local Communities important role in REDD+ projects
2. Be able to discuss policy frameworks in support of Indigenous People and Local communities in REDD+ projects
3. Be able to explain the importance of FPIC for Indigenous Peoples and Local Communities in REDD+ projects

Lesson Outline

Module 7: Indigenous Peoples and Local Communities in REDD+

7.1 Introduction of Indigenous People and Local Communities in REDD+

Indigenous Peoples and Local Communities (IPLCs) are defined in REDD+ as peoples who have a close relationship with forests and who depend on them for their livelihoods. This includes people who live in or near forests, as well as people who use forest products and services. IPLCs play a vital role in forest conservation and sustainable management. They have traditional knowledge and practices that can be used to protect forests and to mitigate climate change. However, IPLCs are also often marginalized and excluded from decision-making processes that affect their forests.[1]

We shall start by learning key terminologies used in the context of IPLCs:

- **Indigenous Peoples**: The World Bank defines Indigenous Peoples as distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live occupy or from which they have been displaced. International Labour Organization (ILO) defines them as tribal peoples in independent countries whose social, cultural, and economic conditions distinguish them from other sections of the national community and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations
- **Local Communities:** These are communities that are dependent on forest resources for their livelihoods.

- **Forest Communities**: These are communities directly drawing their livelihoods from forest both organized and not organized around community forests associations and marginalized communities.

- **Customary rights:** to patterns of long-standing community land and resource usage in accordance with Indigenous Peoples' and local communities' customary laws, values, customs, and traditions, including seasonal or cyclical use, rather than formal legal title to land and resources issued by the State.[2]

- **Carbon Right**: UN REDD defines carbon rights as claims on the benefit streams from carbon pools (specific forest parcels). Where a market exists for GHG emissions reductions carbon rights may have a financial value. Carbon rights may also define the management responsibilities associated with a specific area of forest.

- **Land tenure** is the social relations and institutions regulating access to and use of land. It includes who owns the land and who uses, manages, and makes decisions about it. The concept refers to both formal (legal) and informal (customary) rules. The constitution of Kenya provides for 3 land tenure forms (Private, public and communal).

7.2 Roles of Indigenous Peoples and Local Communities in Forest Ecosystems

Indigenous Peoples and Local Communities (IPLCs) play a vital role in forests and in REDD+. They have a close relationship with forests and depend on them for their livelihoods, culture, and identity. They also have traditional knowledge and practices that can be used to protect forests and to mitigate climate change.[3]

Indigenous communities amass an extraordinary core of knowledge about how to manage the forest

[1] https://www.un-redd.org/post/indigenous-peoples-and-climate-finance-forest-sector

[2] https://www.un-redd.org/glossary/customary-rights

[3] United Nations Convention on Biological Diversity (CBD), World Intellectual Property Organization (WIPO); United Nations Educational, Scientific and Cultural Organization; Food and Agriculture Organization of the United Nations; United Nations Convention on Climate Change

and utilize it sustainably. Forest conservation programs, therefore, stand to benefit from the wealth of knowledge about nature in the conservation process, generally the indigenous peoples' usage has low ecological footprint and is compatible with the REDD+ initiatives.[4]

For sustainability, REDD+ interventions for each project area require giving attention to community livelihoods, and their impact on land use and carbon emissions. Interventions should enhance positive impact on livelihood.
Community engagement enhances safeguards for REDD+ actions, as well as promotes community livelihoods alongside emission reductions, consequently decreasing community vulnerability to climate change.
Some of the roles that IPLCs can play in forests and in REDD+ include:

➲ **Guardians of the forest:**
IPLCs have a long history of living in and managing forests sustainably and have traditional knowledge and practices that can be used to protect forests and to mitigate climate change.

➲ **Landholders:**
IPLCs often have customary land tenure rights over forests which means that they have the right to use, manage, and benefit from the forests.[5]

➲ **Biodiversity stewards:**
IPLCs often live in areas with high biodiversity and have traditional knowledge of the plants and animals in these areas and can help to protect them.

➲ **Ecosystem service providers:**
IPLCs provide a range of ecosystem services, such as water purification, pollination, and climate regulation which are essential for human well-being and the health of the planet.

➲ **Partners in REDD+:**
IPLCs can be partners in REDD+, which is a global initiative to reduce deforestation and forest degradation. They can provide their traditional knowledge and practices, as well as their land tenure rights, to help to conserve forests and mitigate climate change.[6]

7.2.1 Role of Indigenous Peoples and Local Communities in Climate Change

IPLCs can contribute to climate change mitigation and adaptation in REDD+ through:

▪ **Protecting forests:**
IPLCs can protect forests by practicing sustainable forest management, such as agroforestry and community-based forest management. They can also prevent deforestation and forest degradation by enforcing customary land tenure rights and by raising awareness of the importance of forests.[7]

▪ **Reducing emissions from deforestation and forest degradation:**
IPLCs can reduce emissions from deforestation and forest degradation by adopting sustainable land-use practices, such as avoiding shifting cultivation and reducing the use of fire.[8]

[4] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf
[5] https://climatefocus.com/wp-content/uploads/2022/06/Sink-or-swim-IPLC-lands-and-NDCs.pdf
[6] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf
[7] United Nations Development Group Guidelines on Indigenous Peoples issues, Feb. 2008
[8] https://blogs.worldbank.org/climatechange/people-and-planet-together-why-indigenous-peoples-and-local-communities-are-heart

- **Storing carbon:**

IPLCs play a key role in forest carbon storage by protecting and restoring forests. They can also use traditional knowledge to develop and apply innovative methods of carbon storage, such as biochar production.[9]

- **Adapting to climate change:**

IPLCs can adapt to climate change by developing and applying traditional knowledge and practices, such as drought-resistant crops and rainwater harvesting. They can also build resilience to climate change impacts by strengthening their institutions and governance systems.[10]

- **Promoting sustainable development:**

IPLCs can promote sustainable development by using their traditional knowledge and practices to develop and implement sustainable solutions to climate change. They can also advocate for policies that support sustainable development.[11]

Exercise 7.1

1. Who are Indigenous Peoples and Local Communities?
2. How do Indigenous Peoples and Local Communities combat climate change?
3. Why are the Indigenous Peoples and Local Communities important in REDD+ implementation?

7.3 Policy Frameworks for Indigenous People and Local Communities

The global community under the UN system and other multilateral agencies have recognized and provided policy and legislative frameworks within which indigenous peoples' rights, knowledge and customary governance practices are promoted, respected and protected. These rights broadly relate to *procedural rights* including rights to participate in decision-making, acquire information, and access justice; and *substantive rights* including rights to self-determination, self-governance, and freedom from discrimination, freedom to practice culture, personal security, health, and education.

Article 8(j) of the Convention on Biological Diversity (CBD) obligates states parties, subject to national legislation, to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval

[7] https://blogs.worldbank.org/climatechange/people-and-planet-together-why-indigenous-peoples-and-local-communities-are-heart
[8] https://www.un-redd.org/post/new-momentum-next-steps-cop26-forest-tenure-commitments
[9] Ibid

and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices.[12] [13]

UNFCCC Copenhagen Decisions[14], for methodological guidance for activities relating to REDD+, recognizes the "need for full and effective engagement of Indigenous Peoples and Local Communities in, and the potential contribution of their knowledge to, monitoring and reporting of activities relating to decisions"

In addition, IPs' rights associated to specific UN agencies, under the human rights systems of the UN, specific instruments dedicated to IPs' rights have been realized. These include, the ILO Convention no. 169 of 1989 on Indigenous and Tribal Peoples, and the United Nations Declarations on the Rights of Indigenous Peoples (UNDRIP) of 2007. For instance, the ILO convention no. 169, prohibits relocation of IPs without consent and calls for informed participation in the context of development, national institutions and programmes, lands and resources. Moreover, a number of multilateral international agencies have established specific policy guidelines on stakeholder engagement and safeguards on IPs' rights, including on the right to Free, Prior, Informed Consent (FPIC).[15]

Cancun Agreements: The agreements were adopted at COP 16 of the UNFCCC in 2010 and they recognize the importance of the role of IPLCs in REDD+, where they call for effective participation of IPLCs in REDD+ decision-making and benefit-sharing.[16]

7.3.1 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)

The (UNFCCC) framework for REDD+ refers to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The rights of IPs are further enshrined within the Cancun Safeguards,[17] that among others provide for (i) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples; (2)The full and effective participation of relevant stakeholders, in particular Indigenous Peoples and Local Communities, in the [REDD+] actions (UN, 2008; AIPP, 2010).[18]

[12]Convention on Biological Diversity (CBD), art. 8(j), 2006; http://www.biodiv.be/convention/cbd-text
[13]Legal Companion to the UN-REDD Programme Guidelines on Free, Prior and Informed Consent (FPIC) International Law and Jurisprudence Affirming the Requirement of FPIC, UN-REDD Jan. 2013
[14]FCCC/CP/2009/11/Add.1, Decision 4/CP.15 p.11- accessed at: http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf
[15]FCCC/CP/2009/11/Add.1, Decision 4/CP.15 p.11- accessed at: http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf
[16]https://redd.unfccc.int/fact-sheets/safeguards.html
[17]https://www.un-redd.org/glossary/cancun-safeguards
[18]https://social.desa.un.org/sites/default/files/migrated/19/2018/11/UNDRIP_E_web.pdf

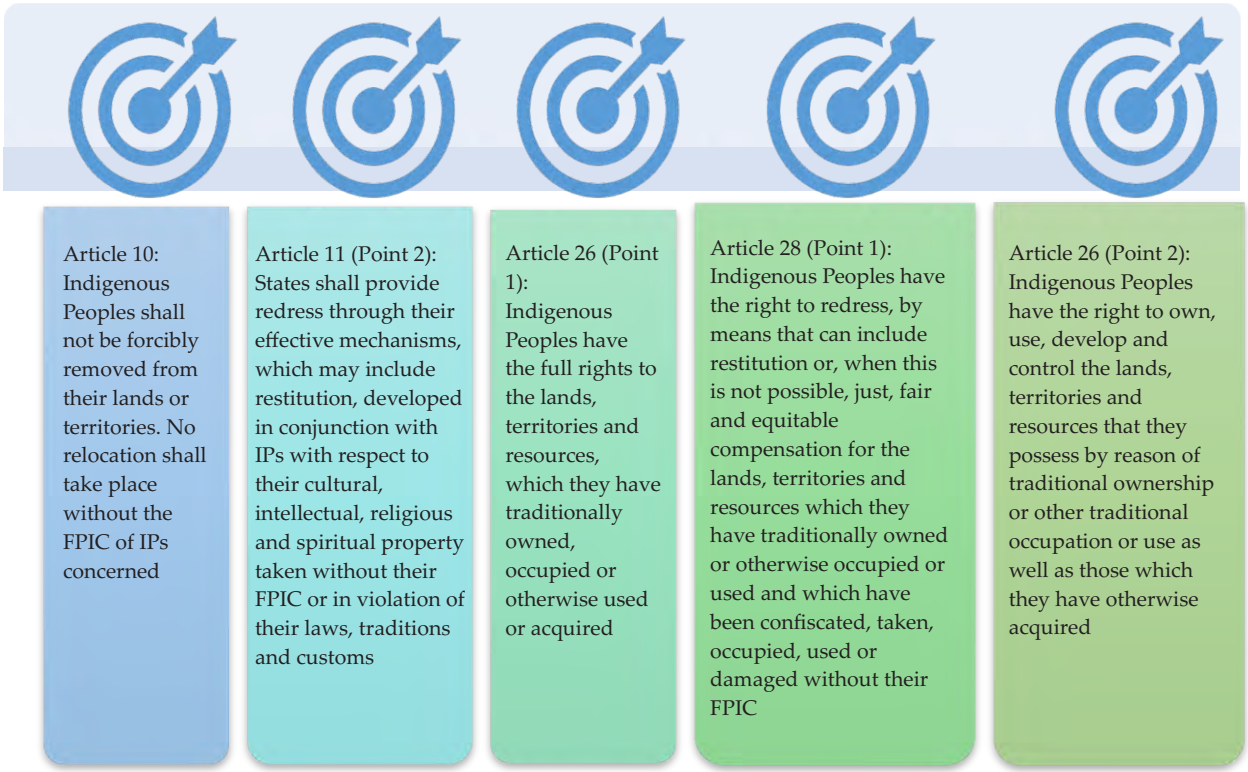

Figure 7.1: Articles of UNDRIP on Indigenous People

7.3.2 Indigenous Peoples and Local Communities in REDD+ Process

UNFCCC decisions relating to REDD+ (including decisions 4/CP.14, 1/CP.16, and 12/CP.17) consistently call on Parties to the Convention to ensure the full and effective participation of relevant stakeholders, in particular, indigenous peoples and local communities, in the design and implementation of REDD+.[19]

During UNFCCC COP15 in Copenhagen, finally came out with a decision that; recognizes that indigenous peoples need to be engaged in monitoring and reporting of REDD+ and the potential contributions of their traditional knowledge; and encourages that guidelines be developed on how indigenous peoples can effectively engage in monitoring and reporting of REDD+ activities.

[19] https://www.un-redd.org/sites/default/files/2022-03/Final%20IP%20Brief.pdf

At the UNFCCC COP16[20] in Cancún, Mexico, in 2010, key concerns raised by indigenous peoples, together with other civil society groups, were addressed in the Cancún Agreements, such as land tenure and forest governance in Para. 72, and the social and environmental safeguards in paragraph 2 of Annex I. Indigenous peoples' rights and concerns are mentioned three times in the text. The outcome document of COP 17 held in Durban, South Africa, in 2017 recognizes multiple benefits of REDD+ in terms of poverty alleviation, biodiversity benefits, and the need for policies that should promote and support safeguards. It furthermore reaffirms that any REDD+ finance will have to be consistent with the safeguards contained in the Cancún Agreements.

The key achievements of indigenous peoples' advocacy and lobbying around the UNFCCC in regard to REDD are:

i. Inclusion of respect for the traditional knowledge and rights of indigenous peoples.

ii. The 'request' that states should ensure full and effective participation of indigenous peoples in activities relating to REDD+.

iii. The obligation of states to report on the implementation of safeguards, and for UNFCCC's Subsidiary Body for Scientific and Technological Advice (SBSTA) to develop its guidelines.

Exercise 7.2

1. What are the policy frameworks supporting Indigenous Peoples and Local Communities in REDD+?
2. What are the key achievements of Indigenous Peoples recognition in UNFCCC for REDD+?
3. What are the articles of UNDRIP on Indigenous Peoples and Local Communities?

7.4 Use of Free Prior Informed Consent (FPIC)

The full and effective participation of indigenous peoples in REDD+ can be in different forms and at different levels. Participation of indigenous peoples and local communities has to be purposive and deliberate.

[20] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf

Participation ought not to be basic, but designed at tackling the 5 levels of participation as summarized in the below:

1.1 Information sharing:
This is a basic level of engagement that is largely an inactive form of participation. It is mostly - 1-way information sharing from REDD+ proponents, the government, and others in the form of factsheets, press releases, presentations, and info-sharing, etc. This form of engagement is not considered transparent and its legitimacy is also lower compared to other forms of communication.

1.2 Consultation:
This is a two-way exchange of information that includes feedback, perspectives, and opinions. It might be either professional or casual. Formal consultations in general are done through public meetings, workshops, and feedback sessions.

1.3 Joint decision-making
–This form of decision-making applies where the community has been adequately sensitized and is therefore in a good condition to make decisions. The process entails capacity development, information disclosure and consultation processes.

1.4 Consent
– this is a freely given decision by the indigenous communities based on clear, understandable information given to them, which will determine the further actions to be taken in the indigenous communities' land/territories.

1.5 Empowerment
– this is a status where the indigenous communities are able to analyze situations and make a decision by themselves with full and effective participation and representation at all levels.

Figure 7.2: Levels of Participation for Indigenous Peoples and Local Communities [21]

7.4.1 Key Considerations During the Engagement of Indigenous Peoples and Local Communities

a) In engaging Indigenous communities, existing institutions, organizations, and processes, such as traditional leaders, headmen, and council of elders must be used to consult with them.

b) Indigenous peoples should be allowed to take part through representatives that they select for themselves in accordance with their procedures and institutions for making decisions. Additionally, it is crucial to make sure that consultations are gender responsive.

c) Special attention should be paid to issues of Land tenure and resource rights, and how it relates to customary/ancestral rights and the national legislation in many countries.

The element of livelihoods for indigenous peoples and other forest residents must be addressed, as well as how they relate, affect, or are affected by the goals of REDD+. These issues must be reflected in the REDD+ design and implementation as illustrated in **Module 1 and 4**.

[21] https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf

The **Table 7.1** shows a summary of the key things to be considered in REDD+ implementation phases:

Table 7.1: Summary of the key things to be considered in REDD+ implementation phases

READINESS PHASE	IMPLEMENTATION PHASE	MONITORING, REPORTING AND VERIFICATION (MRV)
♦ Background on Climate Change, REDD, REDD+ ♦ Key elements of REDD+ in terms of its phases. ♦ Potential adverse impacts and Opportunities for indigenous peoples. ♦ Mechanisms, bodies, and actors involved in REDD+ . ♦ Contents of R-PP, R-PIN, SESA, and R-Package. ♦ Applications of safeguards based on the Cancun Agreement, especially on the full and effective participation of IPs, and respecting the rights and traditional knowledge of Indigenous peoples. ♦ Plans and activities in REDD pilot/demonstration areas. ♦ Bilateral and multilateral funding/ agreements on REDD and their requirements. Other information required by indigenous peoples.	♦ Contents of national REDD+ strategies and its implementation plans. ♦ The plan for further capacity-building. ♦ The kind of technology development and transfer that will be implemented. ♦ Measures to be implemented in addressing drivers of deforestation and forest degradation. ♦ Application of safeguards. ♦ Funding arrangements/agreements. ♦ The role of traditional knowledge. Result-based activities and how they are implemented.	♦ Forest carbon accounting methods and tools. ♦ The safeguards in MRV. ♦ Methodology and Standards of carbon accounting. ♦ Terms of payment, Benefit-sharing mechanisms/ arrangements for IP communities. Timeline of MRV.

Exercise 7.3

1. What are the levels of participation for stakeholder engagement of Indigenous Peoples and local Communities in REDD+?
2. What are the key considerations for engagement of Indigenous Peoples and Local Communities?
3. What are the REDD+ issues for Indigenous Peoples and Local Communities?

7.4.2 Free, Prior, And Informed Consent (FPIC)

Free, Prior, and Informed Consent, (FPIC) is a mechanism and a process wherein indigenous peoples and communities undertake their own/independent collective decision on the matters that affect them. Free, prior, and informed consent (FPIC) is widely recognized as a key foundation for securing the opportunities that REDD+ may provide to indigenous peoples and other forest-dependent communities, and addressing its risks, contributing to more equitable, effective, and sustainable REDD+ initiatives. Free Prior Informed Consent (FPIC), can loosely be interpreted as described below:

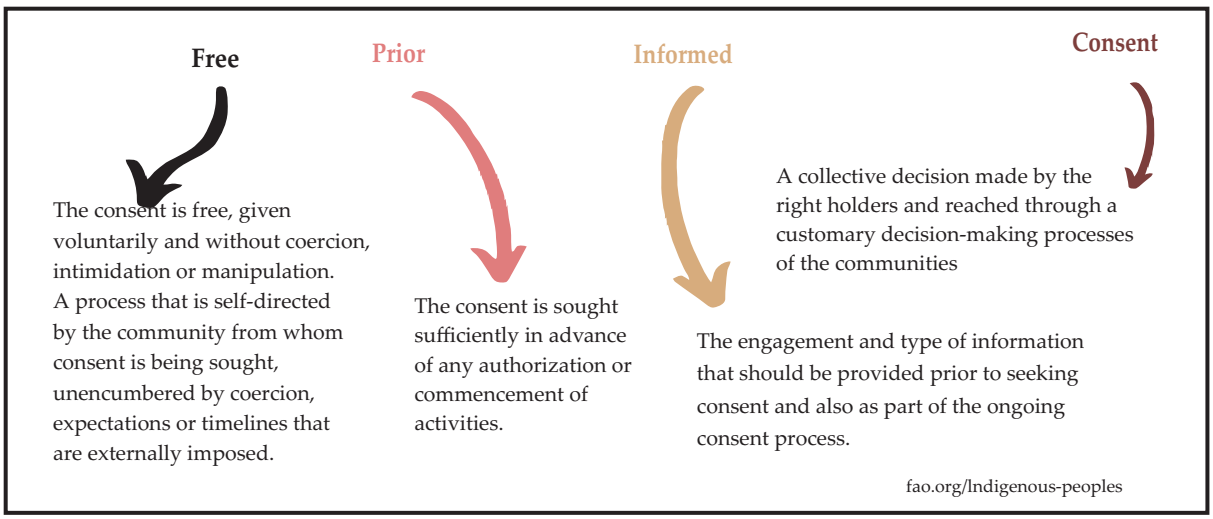

Figure 7.3: Illustration of FPIC[22]

Free: from coercion, intimidation, or manipulation
Prior: to decision-making, adequate lead time must be given for indigenous consultation/consensus processes
Informed: based on full information disclosure. (Nature and scope of intervention, modes of engagement with communities, benefit sharing mechanism, environmental and social impacts of interventions, etc. The information must be given in a language and mode that is understandable
Consent: allows for time for adequate consultation with all affected communities, allows for communal decision-making structures, and yes or no feedback at each stage. Consent should be given or withheld by the community as a whole. Regional Community Forestry Training Centre for Asia and the Pacific (RECOFTC) & Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) guidance on FPIC and REDD+ identifies the following three levels of consent.[23]

[22] https://www.fao.org/3/i6190e/i6190e.pdf
[23] https://www.recoftc.org/publications/0000210

- Consent to discuss the idea of a REDD+ project that will affect community lands and resources.

- Consent to participate in developing a detailed plan for a project.

- Consent to the implementation of the project.

UN-REDD developed Guidelines on FPIC including a non-exhaustive checklist aiming to support partner countries when determining whether an activity will require FPIC in the context of their REDD+ work.[24]

The outcome of the FPIC process includes:

i. Documentation:
FPIC process and outcome should be well-documented and made publicly available. The territories and resources of communities that do not provide their consent should not be included in the proposed REDD+ policy/activity.

ii. Consent and Conditions of Consent:
Communities may choose to grant their consent based on certain conditions (e.g., national-level grievance mechanism benefits continue to be derived from the project). If these conditions are needed, and adequate time for indigenous communities to undertake their own internal deliberations prior to making their collective decision. All community members, including women and youth, should be allowed to express their views, raise their concerns, seek additional information, if needed, and seek clarifications on their questions and/or concerns.

iii. Grievance Redress Mechanism:
Given the significant time and resources that may have been invested during the process, the community should not be able to withdraw consent arbitrarily; thus, if the conditions upon which the original consent was based are being met, ongoing consent is implied. If there is disagreement over whether conditions are being met or not, communities can express their grievance with the relevant.

Exercise 7.4

1. What does FPIC stand for?
2. What are the outcomes of FPIC?
3. What does the UNDRIP define Indigenous Peoples?

[24]FAO, UNDP, and UNEP 2013. Guidelines on Free, Prior and Informed Consent. UNREDD program

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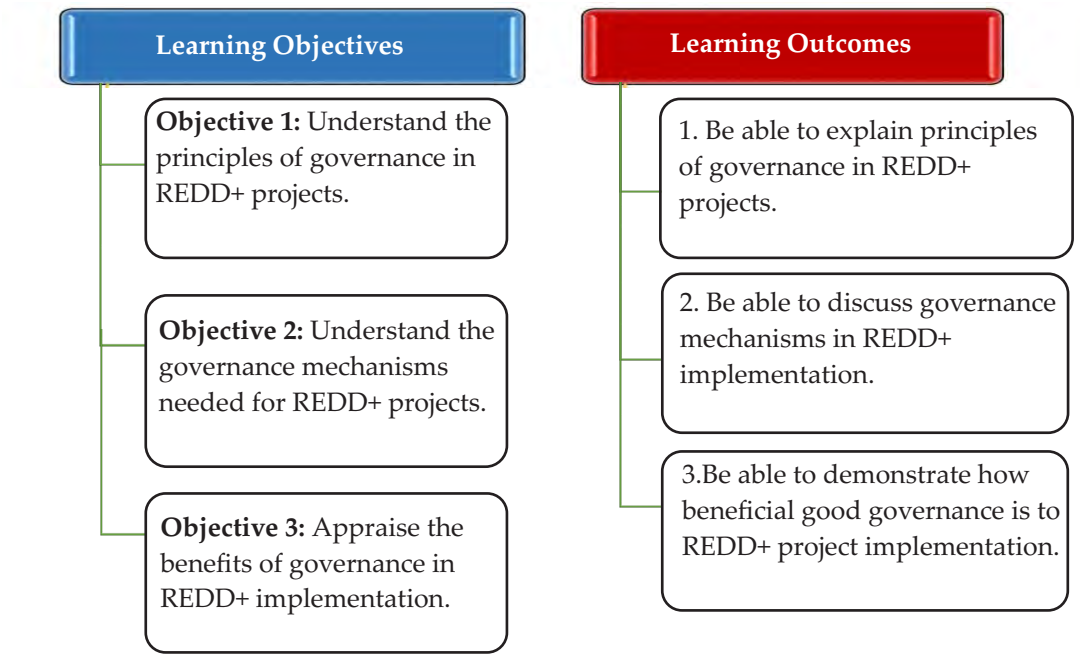
Module 8: Good Governance in REDD+

Module 8: Good Governance in REDD+

8. Module Overview

This module will cover different aspects of governance including the principles of governance, governance challenges in REDD+, the pillars of good governance and finally . approaches to good governance. The module will also explicate the role of governance in REDD+ implementation and why it is needed for success

Learning Objectives and Outcomes



Lesson Outline

8.1 Principles of Governance in REDD+

Governance describes the process of decision-making and the process by which decisions are implemented (or not implemented). These processes can include the political, economic, administrative, and social processes and institutions by which public authorities, communities, and the private sector take decisions on how best to develop and manage for example forest resources.[1]

Good governance is the process whereby public institutions conduct public affairs, manage public resources, and guarantee the realization of human rights in a manner essentially free of abuse and corruption, and with due regard for the rule of law. Governance facilitates one to act in the best interests of a given business in this case REDD+ initiative, improves the performance of a business, provides stability and improves productivity and unlocks new opportunities. It reduces risks, and enables faster and safer growth. It also improves reputation and fosters trust.

Governance includes how a society: organizes how its members live together; responds to different interests and opinions, which are grounded in norms and values; and manages the distribution of resources. Governance also covers: who has the power to make decisions that affect natural resources and natural resource users and how those decisions are made; who has the power and responsibility to implement those decisions and how those decisions are implemented; who is held accountable, and how, for implementation of those decisions[2].

Forest governance refers to how public and private entities make and enforce decisions about the management, use and conservation of forests where effective forest governance engages relevant stakeholders and sectors, and addresses key forest-related issues[3].

8.1.1 Key Principles of Good Governance

Good governance in the context of the REDD+ process refers to the clear, transparent, just, and suitable way of managing forest resources. The process is guided by a number of principles that include accountability, effectiveness, efficiency, fairness/equity, participation, and transparency[4] illustrated in **Figure 8.1**.

These principles should be observed during the REDD+ process including policy and regulatory frameworks development process, planning and decision-making decision processes and implementation enforcement and compliance.

[1]https://learningforsustainability.net/good-governance/
[2]Ibid
[3]https://www.fao.org/redd/areas-of-work/governance-and-tenure/en/
[4]FAO, 2018

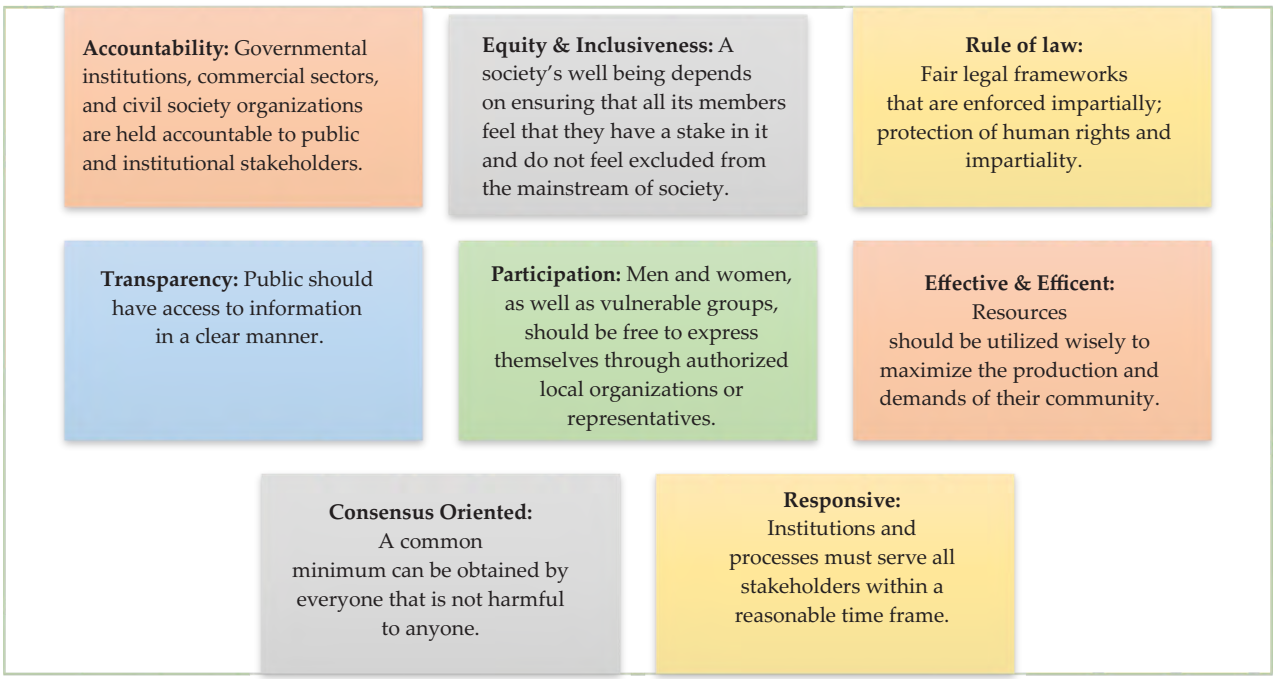


Figure 8.1: Principles of Good Governance[5]

The context of governance in the face of ongoing global climate change, is increasingly being focused on the linkages of the concepts of adaptation[6] and adaptive management.[7] Good governance has elements of equity and social justice, stakeholder inclusion, strategic thinking, accountability and fairness. Many of these key elements are also those that support social learning and lead to the development of resilient communities[8] .

[5]FAO, 2018
[6]https://www.learningforsustainability.net/governance/adaptive_management.php
[7]https://www.learningforsustainability.net/governance/adaptive_management.php
[8]Resilient communities are capable of bouncing back from adverse situations. They can do this by actively influencing and preparing for economic, social and environmental change. When times are bad they can call upon the myriad of resouces that make them a healthy community https://www.learningforsustainability.net/susdev/resilience.php,

Forest governance includes **environmental, economic, social and political aspects of forest resources use and management.** It is much more than forest management. Although governance does not have a common definition, the consensus is that governance involves actors, institutions, networks, relationships (power delegation), voluntary collective action, and capacity to achieve policy objectives as illustrated in **Figure 8.2**.

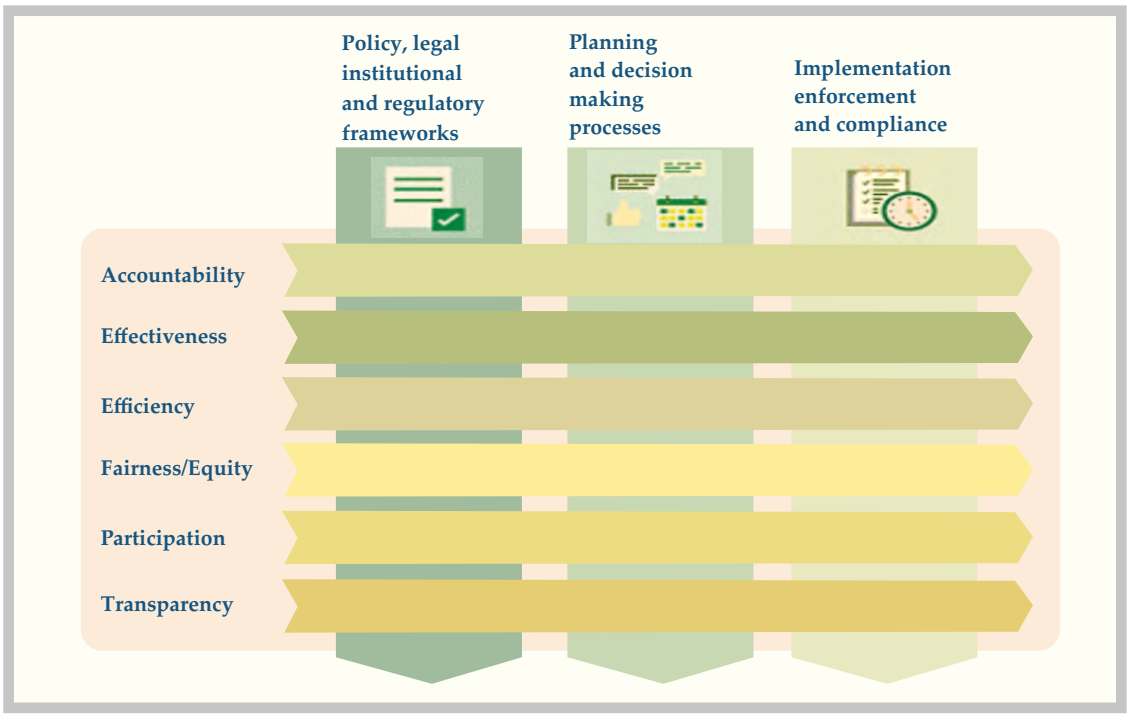


Figure 8-2: Framework for assessing and monitoring forest governance[9]

Forest governance includes;
1. Norms
2. Processes
3. Instruments
4. People
5. Organizations

These elements control how people interact with forests, the context of interaction, and the product of the interaction of a range of actors and stakeholders with diverse interests related to forests which reflects on the importance of stakeholder engagement like FPIC discussed in **Module 7**. Such a broad definition covers many things: **traditional culture**, **modern bureaucracy**, and **private markets** as well as **public laws**.

Good forest governance is tightly connected with democracy, and its key features include adherence

[9]FAO and the World Bank's Program on Forests (PROFOR) framework for improving and measuring Forest Governance 2011, FAO and the World Bank's Program on Forests (PROFOR)

to the **rule of law**, **transparency** and **low levels of corruption**, **stakeholder inputs** in decision-making, **accountability** of all officials, **low regulatory burden**, and resource use efficiency and sustainability.

Exercise 8.1

1. What are the components of good governance?
2. Define forest governance?
3. What are the components of forest governance?

8.2 Governance Challenges in REDD+

Governance challenges in the REDD+[10] context is evidenced in different ways as shown below:

- **Weak institutions and governance frameworks:**[11] **:** Many developing countries that are eligible for REDD+ payments have weak institutions and governance frameworks, which makes it difficult to implement and monitor REDD+ projects effectively.

- **Corruption and rent-seeking:**
The payments associated with REDD+ can be a source of corruption and rent-seeking, which can undermine the integrity of the mechanism and divert funds away from their intended beneficiaries.

- **Lack of transparency and accountability:**
Lack of transparency and accountability in REDD+ can make it difficult to ensure that the benefits of the mechanism are equitably distributed and that the risks of corruption are minimized.

- **Overlapping land use claims:**
In many developing countries, there are overlapping land use claims between different stakeholders, such as the government, local communities, and private companies. This can make it difficult to implement REDD+ projects without displacing or disenfranchising Indigenous Peoples and local communities.

- **Uncertainty about the carbon benefits of REDD+:** There is still uncertainty about the carbon benefits of REDD+, and there is a risk that the mechanism could actually lead to increased emissions in some cases.[12]

[10] https://www.cifor.org/knowledge/publication/5508/
[11] Magrath, W. B. 2012. Corruption and Crime in Forestry in Handbook of Global Research and Practice in Corruption. Edward Elgar.
[12] DOI: 10.17528/cifor/005508

BOX 8.1: Governance Challenge: Corruption

- Corruption within the forest sector is considered to undermine the framing, implementation and subsequent monitoring of policies aimed at conserving forest cover- FAO, 2018.
- Illegal logging, a key driver to degradation and deforestation, is estimated to be worth between US$30 and US$100 billion, or 10–30 per cent of the global timber trade. - INTERPOL Environmental Crime Programme (eds.) 2012.
- Corruption has been raised as a reason why illegal logging continues in many parts of the world, and why environmental and socially damaging activities by mining, agriculture and timber companies operating in tropical forest regions continue with impunity.
- Ninety percent of logging in the Democratic Republic of Congo, a country with one of the largest areas of tropical forests, is illegal or informal. The introduction of the 2002 Forest Code, which incorporates many international best-practice elements, has largely failed to prevent the high levels of illegality (Lawson 2014). The World Bank estimated that Illegal logging in public lands in developing countries attributed to losses in assets and revenue in excess of USD 10 billion (World Bank 2008).
- Given that corruption is widespread in the forestry sectors of most countries that are likely to participate in REDD+, which often have particularly high levels of poor governance as well, it is not unreasonable to expect that corruption may affect REDD+.

– World Bank Report *"Overview of Governance in Forestry" (2017)*

Case study: Corruption and deforestation and forest degradation in Kenya[13]

Box 8.2: Case Study of Corruption, deforestation and forest degradation in Kenya

- ❖ Forest Land Tenure, Excisions & Evictions.
- ❖ Illegal Logging and Forest Crimes.
- ❖ Charcoal Sector.
- ❖ Management Of Government Plantation Forests.
- ❖ Participatory Forest Management and Community Forest Associations.
- ❖ Private Concessions or Non-Timber Forest Products in Public Forests.

[13] https://academia-ke.org/library/download/mef-taskforce-report-on-forest-resources-management-and-logging-activities-in-kenya-2018-pdf/?wpdmdl=7068&refresh=64f2e8f7e0bcd1693640951

8.2. Governance Issues in the REDD+ Process

Illegal logging currently captures the greatest international attention, there are several kinds of forest-related crimes with serious impacts at both national and global levels. In addition to timber theft in its different forms, forest crimes include : corruption and other fiscal crimes related to the use of the forest resources which affects successful implementation of REDD+. Thus, the following are key governance consideration in order to address governance issues in **Figure 8.3 - 8.5**. They include;

Governance Issues		
Key governance consideration	**Examples from the proposals**	**Governance issues that could be overlooked**
Legislative reform and enforcement.	• Implementation and enforcement of existing policies and laws. • Clarifying land tenure and land use plans. • Creating anti-corruption measures.	• Role of law enforcement bodies in REDD+ strategy design. • Potential solutions to identified challenges.
Stakeholder participation and consultation in REDD+ planning & implementation.	• Plans to ensure continuous engagement of all relevant stakeholders in REDD+ planning and implementation • Special emphasis on vulnerable groups, e.g. forest dependent communities, indigenous peoples, and women	• Strategies to engage the most vulnerable including women, PWDs. • Consideration of how stakeholder representatives will be chosen. • Learning from past experiences with participatory process.

Figure 8.3: Governance Issues on Legislation and Stakeholder Engagement in REDD+

Governance Issues		
Key governance consideration	**Examples from the proposals**	**Governance issues that could be overlooked**
Transparency and accountability of REDD+ systems	• Designing transparent and accountable REDD+ revenue management and benefit distribution systems. • Designing participatory and transparent REDD+ monitoring and MRV systems. • Creating functional, accessible and practical dispute/conflict resolution systems.	• Role of civil society in the monitoring and MRV system. • Concrete strategies to promote financial transparency and accountability. • Role of the judicial systems/ombudsman/ADR in dispute/conflict resolution.
Government coordination in REDD+ planning & implementation	• Mainstreaming REDD+ across sectors and within national/county development plans. • Consideration of reforms to improve vertical and horizontal coordination.	• Clear roles and responsibilities for National REDD+ Working Group members. • Engagement of sub-national governments.

Figure 8.4: Governance Issues on Transparency and Government Coordination

Monitoring Governance Issues		
Key governance consideration	**Examples Governance proposals to be monitored**	**Monitoring issues that could be overlooked**
• Monitoring and MRV of efforts to address governance issues relevant to REDD+	• Clarification and reform of laws, including tenure laws. • Development of a land use plan. • Strengthening of law enforcement.	• Concrete plans for how governance issues will be monitored and assessed.
• Monitoring and oversight of REDD+ systems and processes	• Monitoring implementation of consultation and participation mechanisms. • Third-party monitoring of forest management activities and law enforcement. • Independent auditing and participatory oversight of financial management rules including benefit sharing.	• Identification of independent bodies to carry out monitoring and oversight. • Combining elements of monitoring and oversight into an integrated system with feedback loops.

Figure 8.5: Governance Issues on Monitoring and Oversight of REDD+ Systems

8.2.2 Good Governance and REDD+ Process

Governance in UNFCCC is only mentioned in Decision 1/ CP.16, also known as 'The Cancun Agreements'. Elements of good governance are detailed in each of the first four Cancun safeguards as follows and in **Figure 8.6** below:

➲ Decision 1/ CP.16, also known as 'The Cancun Agreements':

❖ ***"Requests developing country Parties... to address, inter alia, the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations... ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities",***

➲ Included in the 7 Cancun Safeguards:

❖ ***"Transparent and effective national forest governance structures, taking into account national legislation and sovereignty".***

➲ Elements of good governance are detailed in each of the first four safeguards:

❖ Consistency with national forest programmes and international conventions.

❖ Transparency and effectiveness.

❖ Respect for knowledge and rights of Indigenous peoples and local communities.

❖ Full and effective participation.

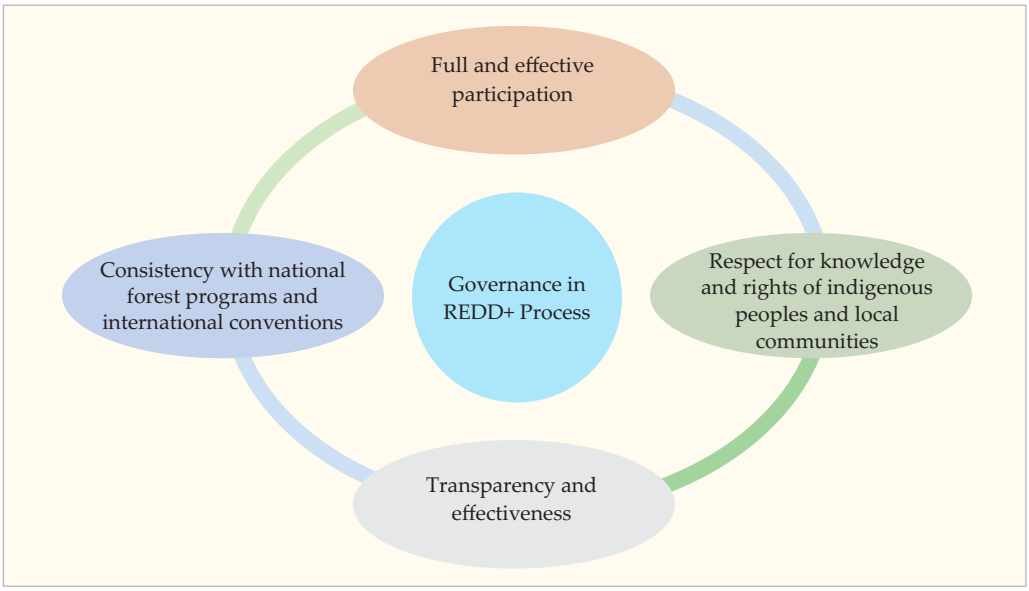


Figure 8.6: Governance in REDD+ Process Using Cancun Safeguards

Good governance principles are necessary to address the remaining three safeguards of:

i. Preventing conversion of natural forests, conserve biodiversity, and ensure social and environmental benefit.

ii. Actions to address the risk of reversals.

iii. Actions to reduce displacement of emissions.[14]

Good governance has been found to be a fundamental part of achieving REDD+ initiatives. Governments are mandated to identify institutions and systems to implement REDD+ activities. An important part of the readiness phase entails prepping institutions to inculcate aspects of transparency, accountability and inclusiveness in decision-making process.

REDD+ development process demands that institutions set up sound governance structures illustrated **Figure 8.7** below showing where governance is needed in the REDD+ process. In many countries, the management of forests is often uncoordinated, lacking accountability to stakeholders. Public participation and access to information that is supposed to be open to the public are also restricted.

Weak governance structures have been linked to forest conversion, illegal forest activity, and

[14]UNREDD Programme Manual

inequitable distribution of forest resources. Readiness for this phase includes institutional reforms to improve governance are a critical part of the REDD+ program.

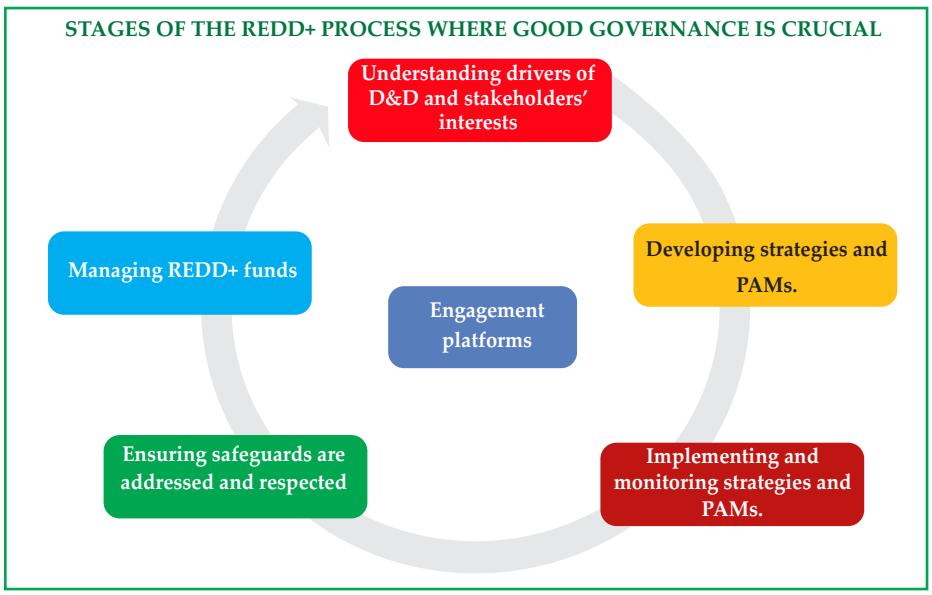


Figure 8.7: Stages of REDD+ where Governance is Crucial[15]

8.2.3 Importance of Good Governance in Stages of National REDD+ Process

There are 5 Stages of the National REDD+ Process where governance is particularly important

i. Understanding the direct and indirect drivers of deforestation and forest degradation, or the barriers to effective conservation, sustainable management of forests, and enhancement of forest carbon stocks.

ii. Developing successful and effective national strategies or action plans (NS/APs) and policies and measures (PAMs).

iii. Implementing and monitoring strategies and PAMs.

iv. Ensuring that safeguards are addressed and respected.

v. Managing REDD+ funds in a transparent and accountable manner, to avoid risks such as undue influence, fraud or embezzlement.

[15] https://www.un-redd.org/sites/default/files/2021-10/UN-REDD%20ACADEMY_2018_12reduced.pdf

Exercise 8.2

1. What are the legal international instruments for governance in REDD+?
2. What are the areas of governance in REDD+ process?
3. What are the five stages for national REDD+ process where governance is important?

8.3 Pillars of Good Governance

FAO and the World Bank's Program on Forests (PROFOR) developed the Framework for Assessing and Monitoring Forest Governance (the Framework), which introduces the three pillars and six principles of forest governance in **figure 2** and **Box 3**[16].

i. Legal framework:
The key elements of the legal framework are non-binding policy instruments (strategy, policy, plans and programmes) and legally binding instruments (statutory law and regulations).

ii. Institutional framework:
It is primarily composed of public administrative bodies, their mandates and powers are established by legal framework.

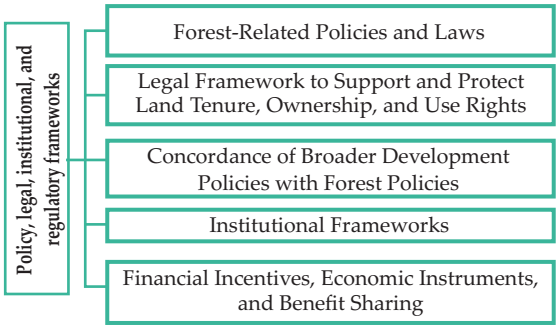
iii. Compliance framework:
The role is to ensure that actions comply with the rules set out by the legal framework and to address any grievances that may arise.

[16]FAO and the World Bank's Program on Forests (PROFOR) framework for improving and measuring Forest Governance 2011, FAO and the World Bank's Program on Forests (PROFOR)
https://www.researchgate.net/publication/313538880

Box 8.3: Pillars of Good Forest Governance

PILLAR 1: POLICY, LEGAL, INSTITUTIONAL, AND REGULATORY FRAMEWORKS

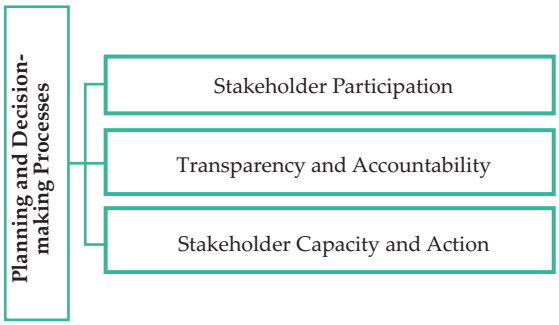
Considers long-term systems of policies, laws, rules, and regulations within the forest sector and in other sectors that impinge on forests Components under Pillar 1 address the clarity and coherence of these systems and how they interact to define the overall context for forest use, management, and forest-related Decision-making.



PILLAR 2: PLANNING AND DECISION-MAKING PROCESSES

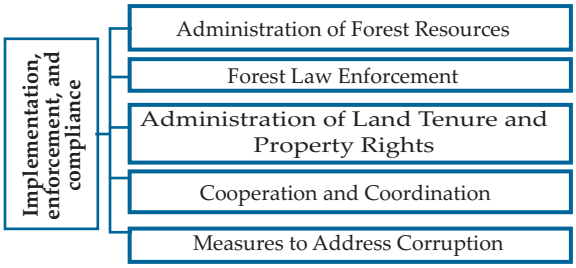
Considers the degree of transparency, accountability, and inclusiveness of key forest governance processes and institutions.

As well as explores the characteristics of these processes and institutions; the operation of key agencies and the space they create for the participation of stakeholders; and the accountability of power holders and decision-makers.



PILLAR 3: IMPLEMENTATION, ENFORCEMENT, AND COMPLIANCE

Examines the extent to which the policy, legal, institutional, and regulatory frameworks are implemented. And further considers the level of effectiveness, efficiency, and equitability of implementation.



Exercise 8.3

1. What are the pillars of governance in regard to REDD+ implementation?
2. What are the frameworks for governance in REDD+?
3. Forest governance guarantees successful implementation of REDD+ projects True/ False

8.4 Approaches to Good Governance

Good governance can help to ensure that REDD+ is implemented effectively, equitably, and sustainably[17]. There are a number of approaches to good governance which include:

➲ **Strengthening institutions and governance frameworks:**
Through improving the capacity of government agencies to manage and regulate forest resources, and reducing corruption and rent-seeking.

➲ **Promoting transparency and accountability:**
Making information about forest resources more accessible to the public, and ensuring that decision-making processes are transparent and accountable.

➲ **Involving all stakeholders in decision-making:**
Involvement of local communities, governments, and private companies, so that the benefits of REDD+ are equitably distributed and that the risks of conflict are minimized.

➲ **Developing clear and transparent rules and procedures:**
Developing clear and transparent rules and procedures for REDD+, so that everyone involved knows what is expected of them and which will help to reduce the risk of corruption and rent-seeking.

➲ **Monitoring and evaluating REDD+ projects:**
Through monitoring and evaluating REDD+ projects to ensure that they are achieving their intended objectives as it helps to identify any problems early on and take corrective action.

➲ **Respect for human rights:**
The rights of local communities, Indigenous Peoples, and other forest-dependent people must be respected in the design and implementation of REDD+ projects.

➲ **Gender equality:**
REDD+ must be designed and implemented in a way that promotes gender equality and benefits all especially women and girls

➲ **Climate justice:**
REDD+ must be implemented in a way that is fair and equitable, and that does not disproportionately benefit the wealthy or powerful

[17] https://www.oecd.org/cfe/regionaldevelopment/Wolfe(2018)ExperimentalGovernanceConceptualApproaches.pdf

These are some approaches to good governance in REDD+ however, specific approach that is most appropriate will vary depending on the country or region in question. All of these approaches are essential for ensuring that REDD+ is implemented effectively and sustainably.

Exercise 8.4

1. What are the approaches to good governance?
2. Gender equality is not a considered in good governance True / False
3. All approaches to good governance are useful in REDD+ implementation True / False

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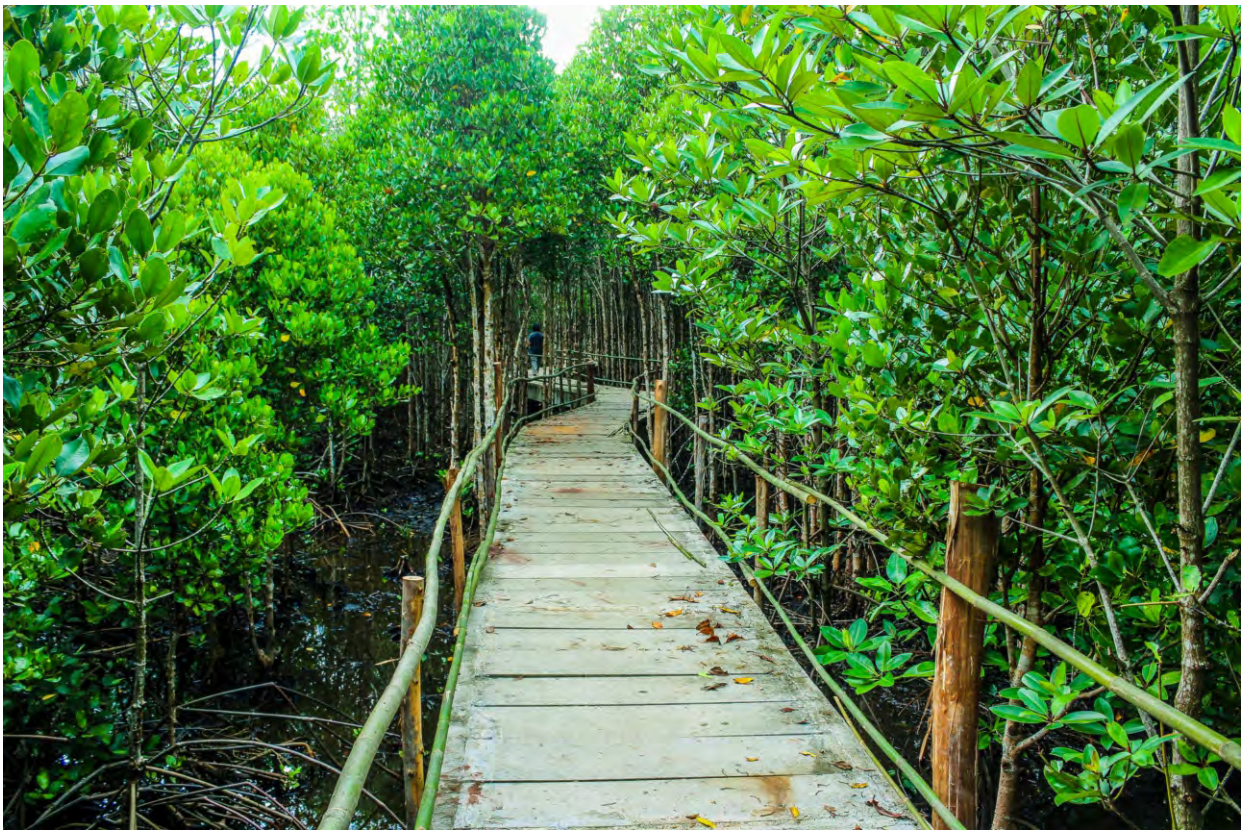

Module 9

REDD+ as Nature-Based Solution

CONSERVATION INTERNATIONAL

Module 9: REDD+ as Nature-based Solution

9. Module Overview

In this module, the focus will be on nature-based solutions (NbS), the relationship between NbS and climate change response as well as the forest sector and its application in REDD+.

Learning Objectives and Outcomes

Learning Objectives

- **Objective 1:** Understand what are Nature-based Solutions
- **Objective 2:** Discuss nature-based solutions in climate change response for REDD+ projects
- **Objective 3:** Understand Nature-based Solutions in forest ecosystems for REDD+ projects

Learning Outcomes

1. Be able to explain the basics of Nature-based Solutions in REDD+ projects
2. Be able to discuss the role of Nature-based Solutions to climate change response in REDD+ projects
3. Be able to demonstrate the role of Nature-based Solutions in forest ecosytems for REDD+ implementation

Lesson Outline

Lesson 9.1:	Understanding the basics of Nature-based Solutions
Lesson 9.2:	Nature-based Solutions and Climate Change
Lesson 9.3:	Nature-based Solutions and Forests
Lesson 9.4	Role of REDD+ as a Nature based-Solutions
Quiz	Module Assessment

9.1 Understanding the Basics of Nature-based Solutions

What is Nature-based Solutions?

The International Union for Conservation of Nature (IUCN) defines Nature based solutions (NBS) as ***Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits***".[1,2]

World Wildlife Fund (WWF) defines Nature-based Solutions as: "***Ecosystem conservation, management and/or restoration interventions intentionally planned to deliver measurable positive climate adaptation and /or mitigation benefits that have human development and biodiversity co-benefits managing anticipated climate risks to nature that can undermine their long-term effectiveness.".***[3]

Figure 9.1: Nature-based Solutions Visualized Diagram[4]

While a number of definitions of NbS have been proposed, none have been universally adopted. The lack of unanimity on a definition may not be surprising, given the range of objectives included in the approach as illustrated in ***Figure 9.1****.*

[1] https://www.iucn.org/our-work/nature-based-solutions
[2] IUCN 2016
[3] **WWF 2020**
[4] Seddon *et al.*, 2021

9.1.1 Principles of Nature Based Solutions

The IUCN formulated eight key principles for NbS which are summarized in **Box 9.1**. These principles focus on conservation efforts, societal challenges and benefits accrued from application of NbS, biodiversity conservation and improvement of ecosystems. These principles are vital if incorporated in the project designs so as to enhance ecological sustainability.[5]

Box 9.1: Principles of Nature-based Solutions

Principle 1: NbS embrace natural conservation norms (and principles).
Principle 2: NbS can be implemented alone or in an integrated manner with other solutions to societal challenges (e.g., technological and engineering solutions).
Principle 3: NbS are determined by site-specific natural and cultural contexts that include traditional, local and scientific knowledge. NbS are evidence-based approaches built on a thorough understanding of particular ecosystems.
Principle 4: NbS produce societal benefits in a fair and equitable way in a manner that promotes transparency and broad participation.
Principle 5: NbS maintain biological and cultural diversity and the ability of ecosystems to evolve over time.
Principle 6: NbS are applied at a landscape scale such as watersheds or large forests - which usually combine several ecosystems.
Principle 7: NbS recognize and address the trade-offs between the production of a few immediate economic benefits for development, and future options for the production of the full range of ecosystem services.
Principle 8: NbS are an integral part of the overall design of policies, and measures or actions, to address a specific challenge.
For NbS interventions to have broad influence, it is important to make sure that they are not only practically.

9.1.2 What Qualifies as Nature-based Solutions?

IUCN developed standards/Criteria for projects to qualify as NbS. The Standard aim to equip with a robust framework for designing and verifying NbS that yield the outcomes desired, in solving one or several societal challenge(s). The Standard consists of 8 Criteria and 28 Indicators as follows:[6]

1. Criterion 1: NbS effectively address societal challenges

1.1. Prioritizes the most pressing societal challenges.

1.2. The societal challenge(s) addressed are clearly understood and documented.

1.3. Clear tangible benefits and outcomes for human well-being.

2. Criterion 2: Design of NbS is informed by scale

2.1. Design must respond to interactions between the economy, society and ecosystems.

[5] https://www.iucn.org/our-work/nature-based-solutions
[6] https://www.iucn.org/our-work/nature-based-solutions

2.2. Design is integrated and complements other sectoral interventions.

2.3. Design incorporates risk identification and management beyond intervention site.

3. Criterion 3: NbS result in a net gain to biodiversity and ecosystem integrity

3.1. The NbS actions directly respond to evidence-based assessment of the current state of the ecosystem and prevailing drivers of degradation and loss.

3.2. Clearly identifies, measures, and periodically assesses biodiversity conservation outcomes.

3.3. Monitoring includes periodic assessments of unintended adverse consequences on nature arising from the NbS.

3.4. Opportunities to enhance ecosystem integrity and connectivity are identified and incorporated into the NbS strategy.

4. Criterion 4: NbS are economically viable[7]

4.1. Identifies and documents the direct and indirect benefits and costs associated with the NbS, including who pays and who benefits.

4.2. Choice of NbS supported by a cost-effectiveness study, including the likely impact of any relevant regulations and subsidies.

4.3. NbS effectiveness is assessed against other available alternatives, taking into account any associated externalities.

4.4. NbS design considers a portfolio of resourcing options such as market-based, public sector, voluntary commitments and actions to support regulatory compliance.

5. Criterion 5: NbS is based on inclusive, transparent, and empowering governance processes

5.1. A fully agreed upon feedback and grievance resolution mechanism is available to all stakeholders before an NbS intervention is initiated.

5.2. Participation is based on mutual respect and equality, regardless of gender, age, or social status, and upholds the right of Indigenous Peoples to Free, Prior, and Informed Consent (FPIC).

5.3. Stakeholders who are directly and indirectly affected by the NbS have been identified and involved in all processes of the NbS intervention.

5.4. Decision-making processes document and respond to the rights and interests of all participating and affected stakeholders.

5.5. Where the scale of the NbS extends beyond jurisdictional boundaries, mechanisms are established to enable joint decision-making of the stakeholders in the affected jurisdictions.

[7] https://www.iucn.org/our-work/nature-based-solutions

6. Criterion 6: NbS equitably balance trade-offs between the achievement of their primary goal(s) and the continued provision of multiple benefits[8]

6.1. The potential costs and benefits of associated trade-offs of the NbS intervention are explicitly acknowledged and inform safeguards and any appropriate corrective actions.

6.2. The rights, usage of and access to land and resources, along with the responsibilities of different stakeholders, are acknowledged and respected.

6.3. The established safeguards are periodically reviewed to ensure that mutually-agreed trade-off limits are respected and do not destabilize the entire NbS.

7. Criterion 7: NbS are managed adaptively, based on evidence

7.1. A NbS strategy is established and used as a basis for regular monitoring and evaluation of the intervention.

7.2. A monitoring and evaluation plan is developed and implemented throughout the intervention lifecycle.

7.3. A framework for iterative learning that enables adaptive management is applied throughout the intervention lifecycle.

8. Criterion 8: NbS are sustainable and mainstreamed within an appropriate jurisdictional context

8.1. The NbS design, implementation and lessons learnt are shared to trigger transformative change.

8.2. The NbS informs and enhances facilitating policy and regulation frameworks to support its uptake and mainstreaming.

8.3. Where relevant, the NbS contributes to national and global targets for human well-being, climate change, biodiversity and human rights, including the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

9.1.3 Why Implement Nature-Based Solutions

➲ NbS are increasingly viewed as an effective strategy to address climate change and biodiversity loss, two of the biggest global challenges of this century and has its roots in the relationship between biodiversity and human well-being.

➲ NbS offer an opportunity to preserve and restore critical carbon sinks while supporting biodiversity and local communities.

➲ NbS is premised on the understanding that healthy natural and managed ecosystems generate a variety of services that are essential to human well-being, such as carbon storage, flood control, soil conservation, clean air and water, food, fuel, medical treatments, and genetic resources.

➲ Ecosystem degradation is in turn linked to

[8] https://www.iucn.org/our-work/nature-based-solutions

reduced provision of ecosystem services and a decline in human well-being, highlighting the interdependence of people and nature, and the need for improved conservation, restoration and sustainable ecosystem management to reverse this decline. [9]

➲ Nature-based Solutions interventions are designed to move people from being passive beneficiaries of nature, to proactively protecting, managing or restoring ecosystems as a contribution to addressing a range of major societal challenges. Nature-based solutions must benefit biodiversity and support the delivery of a range of ecosystem services.[10]

Exercise 9.1

1. What is nature-based solutions?
2. What are the principles for nature-based solutions?
3. What are the criteria to use to define what is a nature-based solution?

9.2 Nature-based Solutions and Climate Change Response

Recently, "Nature-based Solutions" (NbS) have gained traction as a preferred approach for addressing imminent environmental and societal challenges. While NbS have been suggested to serve a number of purposes, the appeal of the concept stems largely from two concerns. One is climate change. [11] The earth is warming at rates rarely seen in the geological record due to the rapid accumulation of carbon dioxide and other greenhouse gases in the atmosphere. Climate change creates a need for measures both to mitigate and to adapt to it[12]. The human impact on the planet is also reflected in losses of biological diversity is the second concern. Current losses may be approaching rates that are only found during a handful of cataclysmic events in the fossil record. While climate change is implicated in biodiversity loss, the larger culprit is often identified as the loss of natural habitats that maintain diverse assemblages of organisms.[13] There is growing interest in Nature-based Solutions (NbS) as an approach to tackle climate change with socio-economic and environmental co-benefits. Some of the aspects of NbS include storing carbon to mitigate climate change, maintaining areas of vegetation to protect against higher temperatures, preventing further climate-driven increases in storm severity and frequency and providing a range of other services, such as pollination and treatment of pollution.[14]

[9] Nyika and Dinka, 2022
[10] Moreau *et al*., 2022
[11] https://www.un.org/sites/un2.un.org/files/2021/04/nature-based-solutions-20110426.pdf
[12] https://www.lse.ac.uk/granthaminstitute/explainers/what-are-nature-based-solutions-to-climate-change/
[13] Ibid
[14] https://www.un.org/sites/un2.un.org/files/2021/04/nature-based-solutions-20110426.pdf

Importantly, NbS are an ecological approach to climate change action, whilst also enhancing the resilience of natural and managed ecosystems and the human settlements that adjoin them. As part of climate change mitigation strategy implementing the Paris Agreement is primarily set on the premise to curb global emission and adapt to climate change impacts. Authoritative evidence has shown that the global community urgency in limiting global emissions. Reviewing current NDCs, there remains a 13 GtCO2e emission gap to attain a 2 degrees temperature target when conditional and least cost NDCs are implemented. A 15 GtCO2e emission gap exists when unconditional NDCs are implemented as shown in **Figure 9.2**.[15]

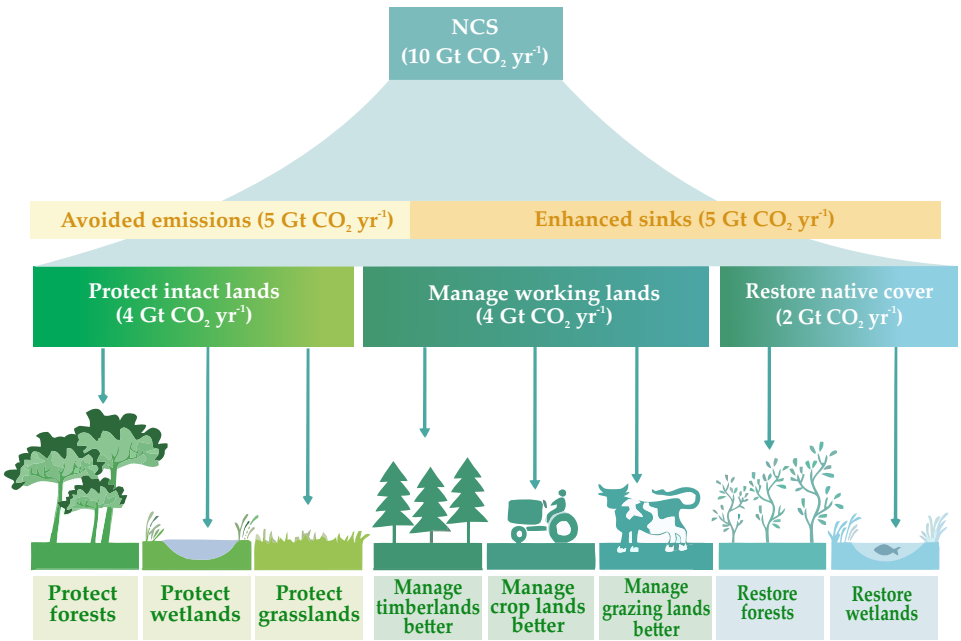

Figure 9.2: Nature-based Solutions in Climate Change Mitigation[16]

[15]EGR,2018

[16]Girardin, C.A.J., Jenkins, S., Seddon, N., Allen, M., Lewis, S.L., Wheeler, C., Griscom, B.W., Malhi, Y. 2021. —Nature-based solutions can help cool the planetif we act now. https://scholar.google.co.uk/citations?view_op=view_citation&hl=en&user=KjklPuMAAAAJ&citation_for_view=KjklPuMAAAAJ:eQOLeE2rZwMC

Below is Kenya's case on application of NbS in Nationally Determined Contributions (NDCs):

Box 9.2: Case Study of Kenya's Nationally Determined Contributions (NDCs)[17]

Nature-based Solutions (NbS) in Nationally Determined Contributions (NDCs) could provide a cost-effective solution for climate mitigation, adaptation, and slowing of biodiversity loss.
Kenya's updated Nationally Determined Contribution (NDC) commits to Abate GHG emissions by 32% by 2030 relative to the Business-As-Usual (BAU) scenario of 143 MtCO2eq; and in line with our sustainable development agenda and national circumstances. The time frame for implementation of the NDC is up to 2030, with milestone targets in 2025.

The estimates Kenya's total greenhouse gas emissions at 93.7 MtCO, ze in 2015 and are projected to increase to 143 MtCOze by 2030. The leading source of emissions was agriculture at 40% of the total national emissions, followed by LULUCF at 38% because of deforestation and energy.
Kenya has identified the scaling up of Nature-based Solutions (NbS) for mitigation and enhancement of REDD+ as a key intervention area within its NDS. NbS will be key to attaining targets towards, achievement of a tree coverage of at least 10% of the Country's land area; achievement of land degradation neutrality; and advancing climate-smart agriculture; NbS is central in meeting targets for Agriculture, Forestry and other Land-Use sector (AFOLU).

Application in Agriculture Sector.

The Draft Kenya National Agroforestry Strategy 2021 - 2030[18] estimates the following potentials.

Agricultural low-carbon development options have the potential to abate in the order of 5.54 MtCO2e per year in 203018. The most significant reduction can be achieved through agroforestry, which has an abatement potential of 4.16 MtCO2e per year in 2030.

Other low-carbon development options include conservation tillage and limiting the use of fire in range and cropland management, with abatement potentials of over 1.09 and 0.29 MtCO2e per year in 2030, respectively. The most significant abatement potential can be achieved through the restoration of forests on degraded lands. Abatement potential of 32.56 MtCO2e per year by 2030 is likely through conservation and sustainable forest management interventions. Restoration of degraded forests has an abatement potential of 6.06 MtCO2e per year by 2030, and reducing deforestation and forest degradation potentially can abate 1.57 MtCO2e per year by 2030.

Climate disasters are estimated to be $540 billion every year which calls for more action in terms of climate change adaptation. Mitigation has potential to curb climate impacts in the long-run, it is useful to note that the world remains vulnerable to these impacts due to past and present emissions and warming that remain unchecked. Adaptation to climate change is therefore much needed now with the exacerbated impacts than ever before.[19]

Nature-based climate adaptation is a critical avenue to leverage in responding to climate change impacts because of its multiple benefits.

[17] https://www.ctc-n.org/system/files/dossier/3b/KENYA%20AGROFORESTRY%20STRATEGY%20DRAFT%20February%202021_.pdf
[18] https://www.ctc-n.org/system/files/dossier/3b/KENYA%20AGROFORESTRY%20STRATEGY%20DRAFT%20February%202021_.pdf
[19] https://www.worldbank.org/en/news/feature/2022/05/19/what-you-need-to-know-about-nature-based-solutions-to-climate-change

It facilitates the reduction of negative effects of climate change impacts such as extreme rainfall, heat waves, frequent droughts and floods but preserves ecosystem services requisite for human life, livelihood advancement and development. Vulnerability of people, their livelihoods and economic wellbeing is safeguarded in the face of climate change where nature-based approaches are deployed. Here are some of the possible categories to use NbS in climate change adaptation in **Table 9.1**:

Table 9.3: Example of Nature-based Solutions for Climate Change Adaptation [20]

Category	Broad measure	Example measures	Impact addressed
Agricultural habitats	Agricultural Habitats	· Agro-forestry and crop diversification · Buffer strips and hedgerows improved water retention in agricultural areas · Meadows and pastures · Agro-forestry and crop diversification	· Floods · Flash floods · Drought
	Agricultural management	· Crop rotation · Low till agriculture · Minimum/No till agriculture · Green cover	
Forestry	Forest planting	· Reforestation · Afforestation · Forests in riparian buffers · Land use conversion Maintenance of forest cover in catchment areas	· Climate change mitigation · Land slides · Floods
	Forest management	· Water sensitive forest management · Coarse woody debris · Continuous cover forestry	
Water management	River restoration Floodplain restoration Groundwater restoration Lake restoration Wetland restoration	· Riverbank protection · Natural bank stabilization · Regulation of Sand harvesting · River restoration and rehabilitation · Riverbed material re-naturalization	

[20] https://www.un.org/sites/un2.un.org/files/2021/04/nature-based-solutions-20110426.pdf

Exercise 9.2

1. How does climate change affect the environment?
2. What ways can Nature-based solutions be used for climate change mitigation?
3. Which are the areas for use of nature-based solutions for climate change adaptation?

9.3 Nature-based Solutions and Forests

Global forests cover is approximately over 30 percent of the global land area, which provides habitat for the vast majority of the terrestrial plant and animal species. Unfortunately, forests and the biodiversity they contain continue to be under threat from actions to convert the land to agriculture or unsustainable levels of exploitation, much of it illegal.[21] The most common Nature-based Solutions are those which rebuild degraded and destroyed forest lands, also known as afforestation or reforestation. It is estimated since 1990 alone we have lost 420 million hectares of our forests, largely due to the increasing agricultural demands of our global community.[22]

The Forestry sector provides the majority of carbon credits generated through individual or jurisdictional REDD+ programs which restore, enhance and conserve carbon stocks, and promote ecological and social benefits.

Activities are normally geared towards Sustainable Forest management (SFM).[23] SFM encompasses the administrative, legal, technical, economic, social, and environmental aspects of the conservation and use of forests. It encompasses human interventions aimed at safeguarding and maintaining forest ecosystems and their functions to maintain and enhance the economic, social, and environmental values of all types of forests, for the benefit of present and future generations.

SFM is a central ecosystem-based management approach that can take the form of Afforestation, Reafforestation, Revegetation (ARR), and Improved Forests Management (IFM). When integrated with other sustainable ecosystem-based management approaches and practices, including watershed management and the diversification of forest livelihood they cumulatively qualify as NbS, and promote sequestration of GHGs in both natural forests and plantations.[24] Here are ecosystem-based management approaches:

a) Afforestation/reforestation (A/R) programs:[25] involve planting trees to restore degraded or recently destroyed land to its original state in order to create new carbon sinks. While afforestation operations establish new forests on degraded terrain, reforestation projects restore trees in recently deforested regions. Both strategies reduce emissions as trees swell and generate employment. Some

[21] https://www.fao.org/3/nd786en/nd786en.pdf
[22] https://www.forestsoftheworld.org/goals-strategies/nature-based-solutions
[23] https://www.fao.org/sustainable-forests-management/en/
[24] Charlotte Streck 2021
[25] https://cdm.unfccc.int/UserManagement/FileStorage/I1F73PBNXHYZKV90ETWCL28ASRU6M5

of the carbon programs with the greatest social impact are the smaller, community-led initiatives.

b) REDD+ Projects:
work with local forest communities to address the root causes of deforestation and forest degradation in order to conserve and protect forests.

REDD+, projects save forests and the biodiversity they support. This high-impact project category provides carbon financing to the localities responsible for caring for our last surviving forests, which are priceless carbon sinks and biodiversity hotspots.

Box 9.3: Examples of existing projects in Kenya.

Restoration of Degraded Lands through Reforestation in MAU Forest Complex. The project was submitted under the Clean Development Mechanism and involves the reforestation of 8,813 hectares within the Mau Forest Ecosystem. It entails the establishment of a commercial plantation in an un-stocked compartment/sub-compartment in the backlog area of Mau Forest Complex and its restoration through continual effective forest management practices. The plantation of the commercial species will restore the timber stock of the gazetted forest and enhance the overall sustainability of the natural resource, community development, and income generation activity. The plantation establishment and Livelihood Improvement (PELIS) scheme of land management will be followed up in the project activity to facilitate plantation in the identified backlog area.

Box 9.4: Examples of such projects in Kenya.

The Kasigau Corridor REDD Project - Phase II The Community Ranches.

The objective of the project is to protect in perpetuity those dryland forests that form a wildlife dispersal and migration corridor between Tsavo East and Tsavo West National Parks, to conserve the important biodiversity found in those forests, to provide alternative sustainable development opportunities for the local communities that live adjacent to the forests and to prevent the Emissions that would otherwise occur were those dryland forests to be converted to subsistence agriculture using the Slash and Burn methods typical to this area of Kenya.

c) Improved forest management (IFM):
Targets the adoption of sustainable practices by commercial forests projects such as implement minimum rates of tree cover and longer growth cycles. IFM initiatives can both reduce emissions by allowing trees to grow longer and expanding the amount of forest cover.

Exercise 9.3

1. How does the forest serve as a nature-based solution?
2. What are the three ecosystem-based approaches?
3. Forests are not important in nature-based solutions True / False

9.4 REDD+ as a Nature-based Solution

REDD+ projects are science-backed and focused on protection of existing ecosystems over restoration efforts for climate and biodiversity effects, since it is way more effective to preserve what is already there. While afforestation efforts are underway, deforestation at a large scale is still a challenge and use of REDD+ presents as a possible viable solution.[26] REDD+ projects provide alternative income sources to local communities and therefore do not only protect forests but bring a series of other benefits that go beyond conservation.

REDD+ projects provide the following benefits:

- Avoids the release of the carbon that has been stored in forests for centuries as such they are a classic "avoidance" project.

- They provide a low-cost option to mitigate global greenhouse gas (GHG) emissions in the near term.[27] For instance, the first ever REDD+ project to achieve verification in the Voluntary Carbon Market: The Kasigau Corridor Project will achieve the avoidance of more than 7.5 million tons of CO2 over a 30-year period.[28]

- It reduces biodiversity loss by safeguarding whole ecosystems and all species that live within them. Re-establishing a complete ecosystem takes decades, therefore the REDD+ approach to avoid ecosystem loss tackles the problem at the root and is extremely efficient.[29]

- REDD+ projects usually center around the local and indigenous communities by introducing sustainable usage of the forests and other reliable sources of income.[30] In many cases, employment opportunities for women as well as educational efforts are part of the projects, too. They, therefore, contribute to a large range of SDGs such as poverty reduction, health and wellbeing, hunger alleviation, gender equality, and improving institutions.[31]

In **Box 9.4**, we have a case study on Papua New Guinea using REDD+ as a nature-based solution in meeting its Nationally Determined Contributions.[32]

[26] https://www.forestsoftheworld.org/goals-strategies/nature-based-solutions
[27] Siikamäki et al., 2012
[28] Wildlife Works, 2022
[29] https://www.worldbank.org/en/news/feature/2022/05/19/what-you-need-to-know-about-nature-based-solutions-to-climate-change
[30] https://www.forestsoftheworld.org/goals-strategies/nature-based-solutions
[31] https://www.worldbank.org/en/news/feature/2022/05/19/what-you-need-to-know-about-nature-based-solutions-to-climate-change
[32] https://www.undp.org/publications/consideration-integrating-nature-based-solutions-nationally-determined-contributions-illustrating-potential-through-redd

Box 9.5: Papua New Guinea's National REDD+ Strategy, National REDD+ Finance and Investment Plan (RFIP) and NDC

Papua New Guinea (PNG) in its first NDC, submitted as its INDC34 in March 2016, stated that the country's primary mitigation effort lies in reducing emissions from land-use change and forestry. It stated that it can contribute to addressing the global mitigation gap by reducing deforestation and promoting forest conservation and sustainable management of its forests. The main forestry effort will be coordinated through the existing REDD+ initiative. PNG signaled that further international financial support will be required for effective national scale REDD+ implementation. PNG also highlights that due to the uncertainty in forestry emissions, waste emission and agricultural emissions, the numbers reported in their NDC document do not include these sectors.

In 2017 PNG completed and communicated its National REDD+ Strategy(NRS) for 2017-2027 and communicated it to the UNFCCC in April 2018. The NRS was endorsed by the Government of PNG on 5th of May 2017, decision number 126/2017.

PNGs Climate Change and Development Authority (CCDA) is currently working to complete the REDD+ Finance and Investment Plan (RFIP) so that it can effectively address the needs and gaps identified in the National REDD+ Strategy. Key sectoral retreats were held with Forestry, Lands, Environment and Agriculture sectors. This has enabled work on the costing of sector-based action plans and identification of potential financial options to implement the National REDD+ Strategy. The development of the RFIP focused on:

- Mapping specific actions needed to undertake transition from 'business as usual' to a new sustainable development pathway,
- Identifying finance and investment needs,
- Supporting coordination across government, donors and the private sector to ensure sufficient investment, and,
- Addressing mechanisms for financial management and cost-sharing, monitoring and safeguards.

PNG intends to increase ambition and enhance transparency in the revision of its NDC by targeting the forestry sector. It is utilizing an Inter-Agency Technical Working Committee, led by CCDA, consisting of senior decision makers, supported by technical advisors to conduct informed discussions on proposed forest and land-use change targets as well as the required actions to achieve them. Building on the assessments conducted during the forest sector target setting process in the RFIP, PNG will also develop a REDD+ implementation roadmap to complement NDC implementation.

Exercise 9.4

1. What are the benefits of REDD+ as a nature-based solution?
2. How did Papua New Guinea use REDD+ for its Nationally Determined Contributions?
3. REDD+ projects are not nature-based solutions True / False?

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