



A Guide to Carbon Projects for Conservancies

Acknowledgements



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While KWCA undertook to keep the information up-to-date and correct, KWCA makes no representation nor warranty on the completeness, and accuracy of the information and data in this guide. The guide serves as a recommendation and for general information purpose, informed by practices within the existing and developing land-based carbon projects in Kenya and Tanzania, practitioners views and the legislative frameworks impacting on carbon projects including the Climate Change (Amendment) Act 2023 and Carbon Markets Regulations 2024.

Foreword by Dickson Ole Kaelo



Conservancies in Kenya have increased from just four in the early 1990s to over 200 today. They are found in 29 counties, in private and community land and in a few cases overlap with public land, from forests to marine areas. 1.3 million people are involved and many more conservancies are developing each year. Although conservancies vary in their governance structure and management models, they are similar in their overall purpose: landowner-led action to conserve natural resources and create sufficient benefits for proprietors of the land.

To achieve this, conservancies need to be financially resilient. All of Kenya's conservancies struggle to generate sufficient financial capital to create large-scale social and ecological improvements in their regions. Carbon projects are a financial instrument to support conservancies and have the potential to create substantial ecological and societal impact. They present an opportunity to provide the financial viability that all conservancies need. Yet the carbon sector is alluring, abstract and nascent. It needs careful understanding and navigation to make sure that people's livelihoods, rights and the biodiversity held within conservancies, are protected. Fundamentally, the conservancy as a concept is a democratic institution with competing interests. It is a system to negotiate the use of scarce resources among multiple users and a mechanism for securing peace in volatile landscapes. Any carbon project must actively support these core functions.

KWCA believes that carbon markets are not *the* sole solution to the climate crisis. Net-zero pledges enable the status quo of developed countries burning fossil fuels to continue. We believe deep and immediate cuts in the burning of fossil fuels are required to keep global average temperature rise below 1.5°C while addressing the inequality and inequity at the core of the climate crisis. However, we also see that the growing demand for carbon credits provides an opportunity to channel private investment into climate and conservation work.

We also acknowledge that the carbon sector is rapidly evolving, in some cases faster than the checks and balances required for integrity. An increasing number of project developers are seeking out opportunities, with a mix of intentions and knowledge of the Kenyan conservation landscape. While some are focused on social, economic and ecological good, others may be more profit-driven. Conservancies have to be aware of not only the benefits but also the risks of entering a long-term, commercial agreement, in a space where they may have had no prior experience. The carbon sector is full of complex concepts and requires significant technical knowledge and expertise. Additionally, it has come under increased criticism for its lack of inclusivity and respect for human rights. KWCA is committed to the principles that safeguard and promote human rights-based approaches to conservation.

In order for opportunities from carbon to be truly realised by conservancies and those who work with them, it is imperative that we are fully informed and equipped to autonomously guide any investment. This is the purpose of this guide.

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Abbreviations and Acronyms

CCB	Climate Community and Biodiversity Standard
CER	Certified Emission Reduction
CO₂	Carbon dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CDM	Clean Development Mechanism
DNA	Designated National Authority
FPIC	Free Prior Informed Consent
GHG	Greenhouse Gas
MRV	Monitoring, Reporting and Verification
NCS	Natural Climate Solutions
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
REDD	Reducing Emissions from Deforestation and Forest Degradation
SDG	Sustainable Development Goals
UNFCCC	United Nations Framework Convention on Climate Change
VCM	Voluntary Carbon Market
VCS	Verified Carbon Credit Standard
VCU	Verified Carbon Unit
VER	Verified Emission Reduction
VVB	Validation and Verification Body

Glossary

Adaptation: Adjustments in ecological, social, or economic systems to minimise the harm caused by climate change or to exploit beneficial opportunities it may create.

Afforestation, Reforestation and Revegetation: A methodology that quantifies carbon removals from activities that increase the density of trees or other types of woody vegetation through afforestation, reforestation, and revegetation.

Article 6 of the Paris agreement: Under Article 6, a country/countries will be able to transfer carbon credits earned from the reduction of GHG emissions to help one or more countries meet climate targets. Within Article 6, Article 6.2 creates the basis for trading in GHG emission reductions (or “mitigation outcomes”) across countries on a bilateral basis. Article 6.4 establishes a mechanism for trading GHG emission reduction between countries supervised by the Conference of the Parties.

Auditor: Independent role to measure, analyse, and report on GHG emissions produced by an individual, organisation, or event.

Avoidance: One of the two major types of carbon project, along with removal. Projects prevent the release of GHG into the atmosphere that would have otherwise been emitted, such as preventing deforestation in an area with a high rate of logging.

Carbon credit: One tradable carbon credit equals one tonne of carbon dioxide or the equivalent amount of a different GHG reduced, sequestered or avoided.

Carbon emissions: The release of carbon dioxide and other greenhouse gases into the atmosphere, primarily through human activities like burning fossil fuels, deforestation, and industrial processes.

Carbon markets: Trading systems in which carbon credits are sold and bought. Companies or individuals can use carbon markets to compensate for their GHG emissions by purchasing carbon credits from entities that remove or reduce GHG emissions.

Carbon pools: A reservoir of carbon that has the capacity to both take in and release carbon.

Carbon sequestration: The process of capturing and storing atmospheric carbon dioxide. This can occur naturally, such as through forests and soil, or through engineered methods like direct air capture technology.

Carbon sinks: Natural or artificial systems that absorb more carbon dioxide than they release. Common examples include forests, oceans, and wetlands.

Carbon stocks: The amount of carbon stored in natural reservoirs, such as forests, soil, and oceans. These stocks play a crucial role in regulating the global carbon cycle.

Certification: Emission reduction projects require certification, which involves the assessment of GHG emission reductions, their monitoring and reporting. The certification process includes issuing permits based on calculated emissions.

Climate vulnerability: The degree to which a system, community, or ecosystem is susceptible to or unable to cope with the adverse effects of climate change.

Compliance carbon markets: Are created by governments as a result of policy or regulation with the aim of regulating carbon emissions within a certain nation or region.

Developer: Time-bound role with technical expertise for the development of the project - includes baseline field collection and analysis, carbon accounting, stakeholder consultation, and document drafting, guiding a project through validation.

Free, Informed, Prior Consent: Mechanism and process that ensures that all stakeholders, particularly those who may be marginalised, are consulted and involved before any development on their land or resources begins. After consultation they must undertake their own independent collective decision without coercion.

Greenhouse gas: Gases in the atmosphere that absorb and emit radiant energy within the thermal infrared range, leading to the greenhouse effect. The major GHG are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O).

Greenwashing: The act of misleading consumers by falsely claiming that a product, service, or company is environmentally friendly or has made significant efforts to reduce its environmental impact.

Leakage: Refers to a situation where the direct impact of a carbon reduction activity is offset by its indirect impacts to an area beyond that of the project.

Methodology: Specific procedures and guidelines used to calculate and verify the GHG emission reductions achieved by a carbon project. They are an integral part of carbon standards.

Mitigation: Actions taken to reduce or prevent the emission of greenhouse gases into the atmosphere, such as using renewable energy or improving energy efficiency.

Monitoring, Reporting and Verification: The multi-step process to measure the amount of GHG emissions reduced by a specific mitigation activity, such as reducing emissions from deforestation and forest degradation, over a period of time (monitoring). These are then reported to an accredited third party who audits these results (reporting). The third party can then verify these reports so that the results can be certified and carbon credits can be issued (verification).

Nationally determined contributions: A national climate action plan to cut emissions. Under the Paris Agreement, each country is required to establish an NDC and update it every five years. NDCs are not legally binding unless they are transposed into national law.

Natural climate solutions: Protect, manage, and restore natural and working systems in ways that avoid GHG emissions and/or increase carbon sequestration across forests, wetlands, grasslands, and agricultural lands. These approaches to reducing carbon emissions through nature conservation and restoration are now a central component of global and national efforts to address climate change.

Net zero: A state of balance between the amount of GHG emissions produced and the amount removed from the atmosphere over a given period. In a net-zero scenario, the activities of a country, company, or individual do not increase the overall amount of GHG in the atmosphere.

Paris agreement: A legally binding international treaty on climate change. Its overall 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.” It was adopted by 196 parties at the UNFCCC in Paris in December 2015 and began in November 2016.

Permanence: Refers to the degree of confidence that a particular project will keep the carbon out of the atmosphere for a given period of time (usually 100 years or more).

Proponent: The entity responsible for running the carbon project over the full 30+ years of the project lifetime.

REDD: “Reducing Emissions from Deforestation and Forest Degradation” - Framework for emission limitation programs focused on preventing deforestation that was negotiated in the UNFCCC in 2005.

Registry: Systems or platforms where carbon credits and GHG reduction projects are registered and tracked. They serve as an official record-keeping system for carbon credits.

Removal: One of the two major types of carbon credits, along with avoidance. Removal projects aim to absorb emissions from the atmosphere to reduce global warming.

Rights holder: The individual/ entity including community, that has legal rights to carbon. Where land is owned by the community/individual, who is/are involved in directly implementing carbon project activities, then such community/individual is the rights holder; in this case, the rights holder may enter into an agreement with project proponent to represent the carbon rights in the market. Where a community or individual leases their land to third party to develop carbon project and they are not involved in implementation, then the third party is the rights holder.

Safeguards: An overarching term for the processes required by all carbon projects to protect the rights of

stakeholders and includes stakeholder engagement and FPIC.

Stakeholders: Individuals or organisations that have an interest or are affected by the carbon project - in both positive and negative ways.

Standard: Sets of criteria and protocols established to ensure the quality, transparency, and integrity of carbon projects.

tCO₂e: Tonne of CO₂ equivalent. Standardised unit for GHG expressing all emissions in terms of CO₂ with equivalent global warming potential.

United Nations Framework Convention on Climate Change: An international treaty, set up in May 1992, aimed at combating climate change by reducing GHG concentrations in the atmosphere and facilitating global cooperation on climate adaptation and mitigation strategies.

Validation: During validation, a third-party validation body determines whether a project meets all rules and requirements for the standard that the carbon project is aiming to achieve.

Validation/verification bodies: Assess carbon projects for conformity to the carbon standard they are seeking.

Verified carbon Unit: The number of carbon credits a project will produce and is calculated as follows: GHG baseline + GHG project - GHG leakage - GHG risk buffer.

Verified Emission Reductions: VERs are a type of carbon offset exchanged in the voluntary market for carbon credits.

Vintage: The year in which the emissions avoidance or removal underpinning the carbon credit took place.

Voluntary Carbon Market: Enables private organisations and individuals to purchase carbon credits on a voluntary basis.

Part 1

About This Guide



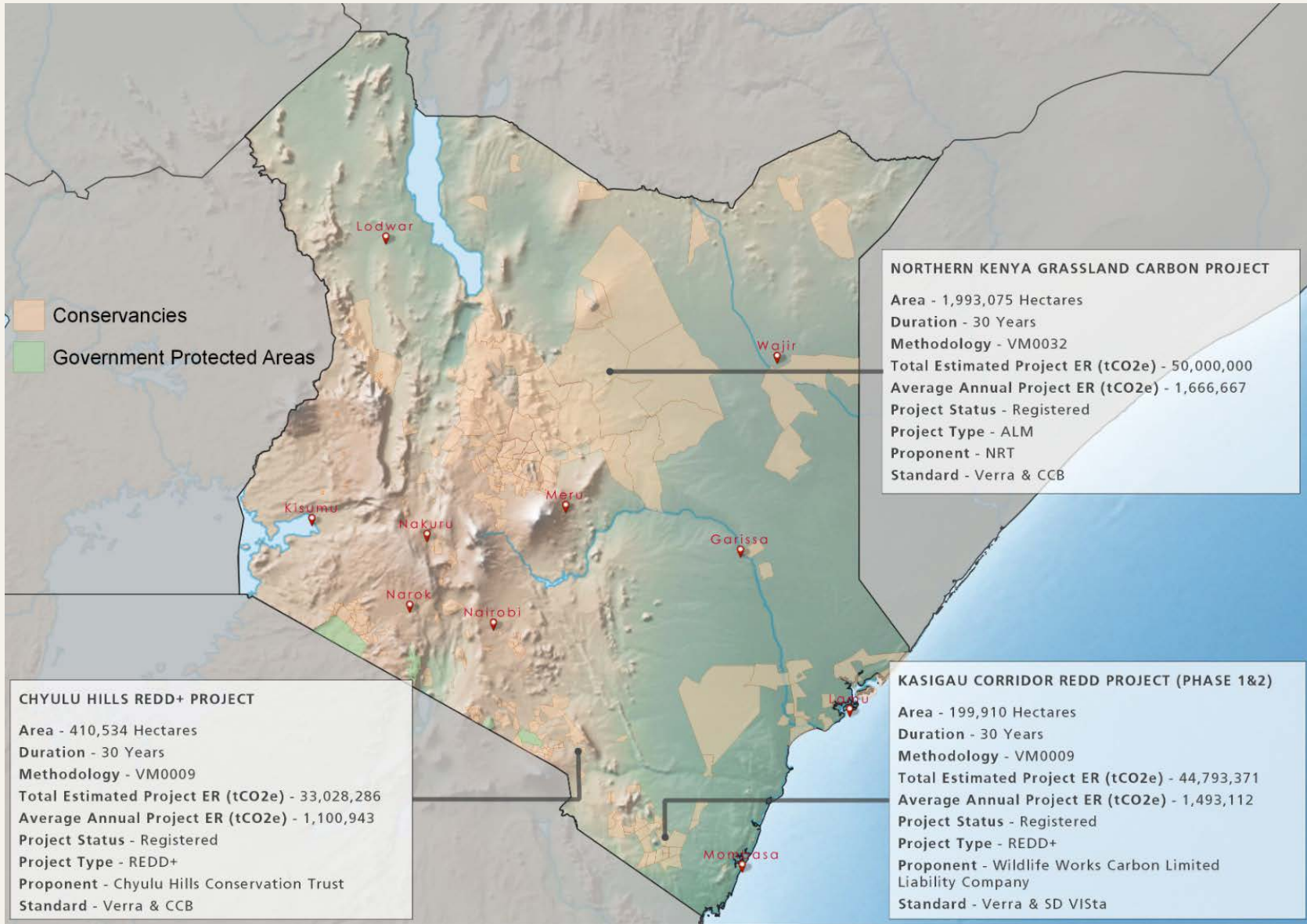


Figure 1. Map of conservancies and conservancy related carbon projects in Kenya

Source: Data was acquired from the Verra registry in 2024. This data might not reflect current emission reductions, and scales of activities. This map is provided to indicate the geographic location of the projects, not the boundaries of the project area. The project area in the Verra registry and the area covered by project activities can differ. Conservancy data from KWS Baseline Database 2024.

Using this guide

What is its purpose and scope?

To equip conservancies with the information they need to demystify the complex, fast-evolving carbon sector and its risks, uncertainties and opportunities; and to support conservancies to engage with the Voluntary Carbon Market (VCM) in a way that enables them, should they partner with project developers, to create equitable arrangements that maximise social, ecological and financial benefits to the conservancy/community.

Ultimately it aims to help conservancy managers, conservancy members and board members, conservancy landscape associations and NGOs supporting conservancies in this space to answer the question, **can we establish and manage a carbon project on our land, and if so, how?**

The guide focuses on Kenya's terrestrial conservancies and therefore on forest and grassland based carbon projects, in the VCM, as these are most relevant for conservancies.

Who is it for?

Conservancy members including boards and managers; conservancy stakeholders and support organisations and community land management committees at varying stages of considering or engaging in the VCM, for NGOs and landscape conservancy associations facilitating the process, and for project developers to understand the complexity and structures of the conservancy landscape.

Why was it developed?

KWCA developed this guide in response to many of Kenya's conservancies seeking to explore the potential of generating revenue from their carbon. At the time this guide was published there were 174 conservancies registered with the KWCA, and hundreds more under development. The KWCA Conservancy Managers Forum in November 2023 was attended by 170 conservancy managers, which was jointly organised by KWCA and Sustain East Africa. Two-thirds of conservancy managers present expressed interest in developing a carbon project. At least 15% of the conservancies represented already had an operational carbon project in place, and 30% of conservancies had been approached by a carbon developer.

How was it developed?

This guide was developed by KWCA through technical support by Sustain East Africa and funded by the Maasai Landscape Conservation Fund (managed by Maliasili). The guide was informed by literature, interviews with carbon experts and independent consultants, and interviews and questionnaires with 170 managers of Kenyan conservancies at the Conservancy Managers Forum in November 2023 hosted by Sustain East Africa and KWCA.



Part 2

Carbon, Projects and Markets

2.1. Carbon

Carbon is a fundamental element found in trees, soil, and the air. It is a critical component of all life on earth.

Large amounts of carbon are stored in natural systems like grasslands, forests, wetlands, both above the ground and in the soil. Healthy ecosystems, with abundant trees, dense grass cover, natural vegetation and rich soils, tend to hold a great deal of carbon. Thick forests with large trees, or mangroves, tend to be the landscapes that store the most carbon. Fossil fuels like coal and oil are made of trees and plants that decomposed over millions of years, resulting in concentrated stores of carbon that people have extracted from under the Earth's surface since the 1800s, as a key source of energy.

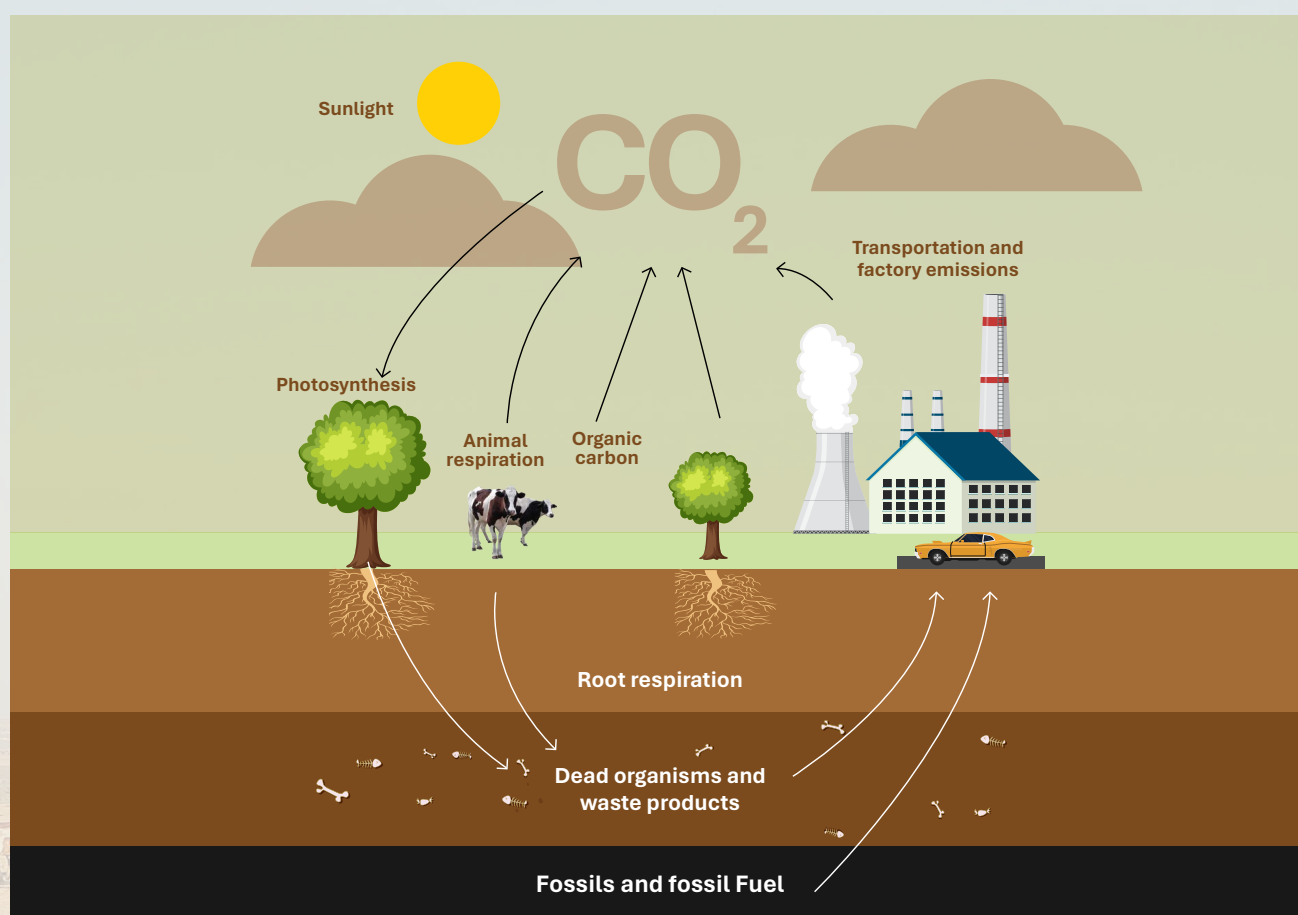


Figure 2. The carbon cycle

‘Carbon pools’ are a reservoir of carbon that have the capacity to both take in and release carbon.

The major ‘carbon pools’ associated with natural ecosystems are:

- 🌳 Above ground vegetation: includes all living biomass above the soil, including stems, stumps, branches, bark, seeds, and foliage.
- 🌳 Below ground biomass: includes all living root biomass of trees or understory plants.
- 🌳 Dead wood: includes all dead woody biomass either standing, lying down or in the soil.
- 🌳 Litter: includes leaves and twigs, and all other small dead or decomposing biomass lying on the ground.
- 🌳 Soil organic carbon: includes all carbon-based material in the soil to a depth of one metre, including small roots and organic matter.

2.2. Climate change

2.2.1. How is carbon linked to climate change?

Burning fossil fuels and the destruction of the natural environment contribute to climate change

The key driver of current climate change is the release of greenhouse gases (GHGs - namely as carbon dioxide - CO₂, methane, nitrous oxide) into the atmosphere. Fuel use, energy production, agriculture and industrial processes release CO₂ into the atmosphere. Carbon is also released by deforestation, firewood burning, wetland drainage, rangeland degradation, and soil tillage. When soils are disturbed or vegetation is degraded, carbon in the soil can break down releasing CO₂. As a GHG, carbon traps heat from the sun, preventing it from escaping back into space and thus leading to a warming of the Earth's surface.



Climate change affects global temperature and weather patterns

Climate change caused by increasing CO₂ in the atmosphere has already increased the global temperature and altered local weather patterns across the planet, making them more extreme and less predictable. Changes include more frequent droughts, heavier rainfall, and extreme flooding. If action on climate change is not taken, the world will get hotter and hotter. The world has until 2030 to cut human-caused CO₂ emissions in half from 2023 (and cut other GHG emissions considerably) to maintain a 50% chance of avoiding the worst effects of climate change.¹ By 2050, CO₂ emissions will need to reach “net zero” – where emissions are in balance with removals – to sustain this chance. Such reductions will require worldwide action by society, governments and businesses.

Vegetation removes carbon from the air

Vegetation, like trees and grasses, helps to prevent climate change, because plants remove carbon from the atmosphere via photosynthesis. Plants also add carbon to the soil as they grow. The more plants grow, the more carbon they remove from the atmosphere and ultimately, store in the soil. Healthy forests and healthy rangelands store more carbon.

¹[Synthesis Report of the IPCC Sixth Assessment Report \(AR6\)](#)

Rangeland and forest health are closely linked to human action

Well-managed grazing can maintain and restore rangeland health and increase soil carbon stocks. Across many of Kenya's rangelands, overgrazing - both in terms of the density of animals and the length of time an area is grazed for - has led to decreasing soil carbon (Figure 3). Good grazing practices require the movement of livestock in one place for short time periods, with rest in between, reducing the overall defoliation of plants.

In forested areas, sustainable management practices like selective logging and protection of young trees can increase carbon stores. Afforestation involves planting trees in areas previously without forest cover, and can improve carbon sequestration. Efforts to reduce deforestation and uncontrolled fires will prevent the loss of important carbon sinks.

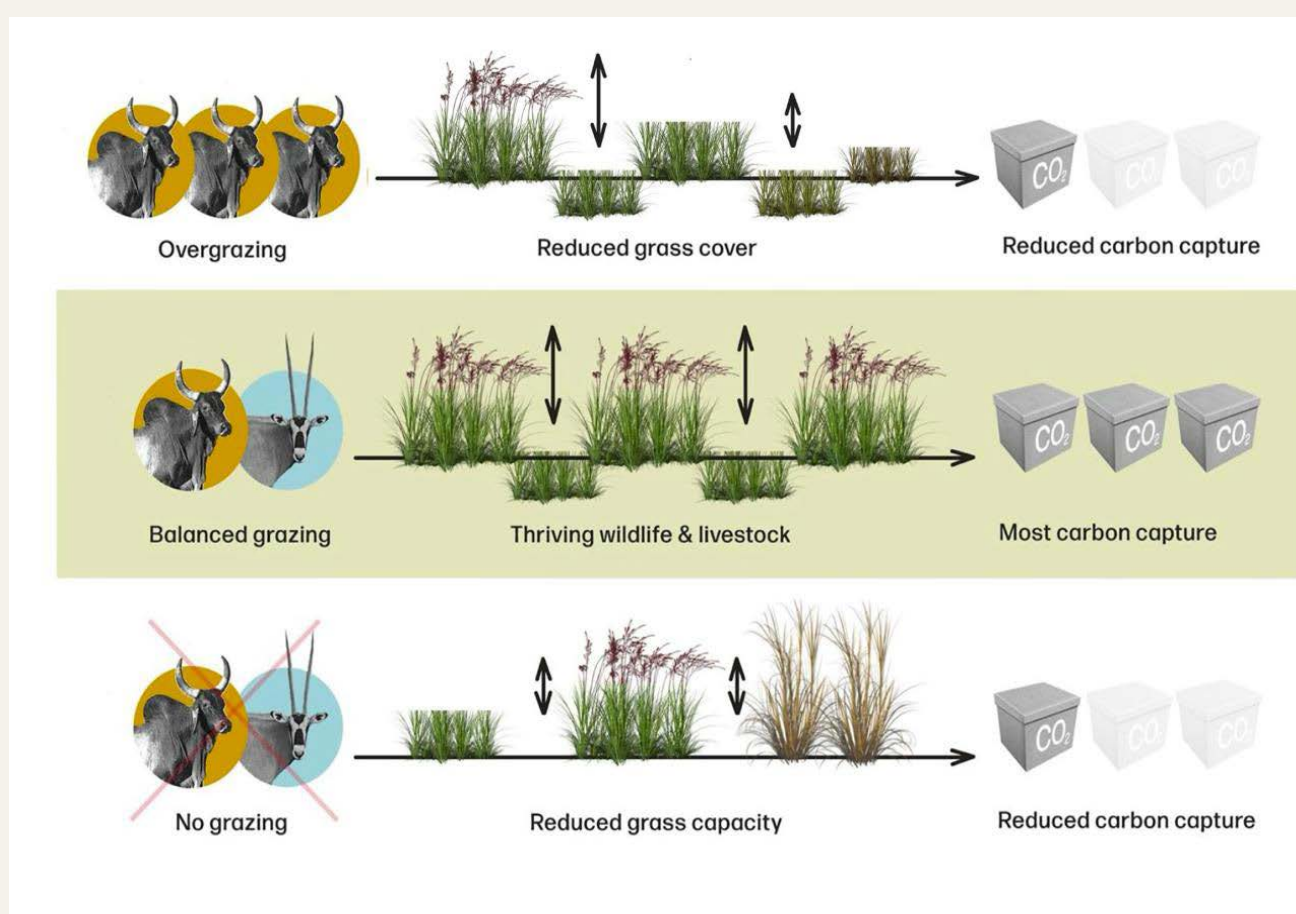


Figure 3. The principles of how grazing can impact carbon sequestration (courtesy of the One Mara Carbon Project)

2.3. Natural climate solutions



Over the past decade, as global efforts to address climate change have intensified, there has been a greater focus on protecting nature as a key way to reduce carbon emissions. These efforts to link nature conservation and ecosystem restoration with combating climate change are now termed ‘Natural Climate Solutions’ (NCS).

NCS protect, manage, and restore natural and working systems in ways that avoid GHG emissions and/or increase carbon sequestration across forests, wetlands, grasslands, and agricultural lands.² NCS could contribute to around 30% of the emission reduction needed to mitigate global warming. They also have massive potential to improve people’s livelihoods and well-being, in addition to protecting biodiversity (and contributing to global commitments to halt climate change and protect biodiversity e.g. Kunming-Montreal Global Biodiversity Framework and Sustainable Development Goals (SDG)).

However, to achieve these goals, NCS projects must be designed and implemented in a socially, politically, ecologically, financially and technically appropriate way. Poorly designed projects will not only fail to achieve these goals but could also exacerbate or create social conflicts, violate human rights, have adverse impacts on biodiversity and undermine confidence in and therefore viability of the carbon market. For carbon projects to succeed in bringing social and ecological benefit and justice they must be not only technically sound, but also be equitable, inclusive and transparent for the owners of the land that holds the carbon.

This guide focuses on terrestrial forest and grassland NCS projects as they lend themselves to being developed in the socio-ecological context of Kenya’s conservancies. The guide can be used to inform design, development and implementation decisions for carbon projects within these two pathways (Box 1 and 2). In the region the most common examples of a forest NCS project is REDD and a grassland NCS project is grassland sequestration.

Any actions by conservancy managers that result in improved forest or rangeland conditions (with more or larger trees in forests, thicker vegetation, or improved grassland cover in rangelands) is likely to store more carbon in the land. This can be the basis for generating carbon credits with an NCS project, using methods to estimate the amount of increased carbon stored through changes in land management.

²PNAS

Natural climate solutions categories

Protection, management & restoration

Forest

Avoided forest conversion: Avoids emission from preventing human conversion of forest to non-forest land use, e.g. agriculture. Includes REDD+ projects

Climate-smart forestry: Avoids emissions and/or increases sequestration in forests via eco-friendly logging, sustainable harvest practices, enhanced regeneration.

Forest plantation management: Extends rotation in managed plantations, enhancing sequestration.

Fire management: Avoids emissions in fire-prone forests with prescribed burns.

Urban canopy cover: Expands urban tree canopy, increasing sequestration, and prevents carbon loss by replacing trees.

Afforestation, Reforestation and Revegetation (ARR): Increased sequestration from restoration of forests, planting trees in previously deforested or degraded areas.

Grassland

Avoided grassland conversion: Avoids emissions by preventing native or managed grasslands and shrublands converting to cropland.

Grassland restoration: Increases sequestration by converting cropland back to grasslands, especially in areas with historical ecosystems.

Improved livestock management: Increases sequestration of soil carbon through practices including planned or rotational grazing of livestock.

Box 1. NCS forest and grassland projects.



Forest and grassland pathways project: examples*		
Project	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD)	Grassland sequestration
Detail	Aims to combat climate change by reducing GHG emissions through forest conservation, sustainable management, and enhancement of forest carbon. It came into existence in 2008 under the UNFCCC. REDD is a globally agreed framework that creates an incentive for national efforts to protect, conserve, and restore forest ecosystems in developing countries by valuing carbon removals, storage and other social and environmental services.	Enhance the carbon storage capacity of grasslands and soils through improved grazing management. Northern Rangelands Trust (NRT) has pioneered one of the first grassland sequestration methods.
Type	Emission reduction	Removal
Activities	Preserving existing forests, improving forestry practices, managing forests sustainably, and increasing their carbon sequestration capacity through measures like reforestation and afforestation.	Improved management of livestock through holistic management, mobility and use of mobile corrals, leading to reduced rangeland degradation.
Impact Metrics	<i>Emissions reduced:</i> 3-12 tCO ₂ e ha ⁻¹ yr ⁻¹ (tonnes of CO ₂ equivalent per hectare per year)	<i>Carbon sequestered:</i> 0.25 - 1.5 t CO ₂ e ha ⁻¹ yr ⁻¹
Annual Revenue	30 - 120 USD ha ⁻¹ yr ⁻¹	2.5 - 15 USD ha ⁻¹ yr ⁻¹
Operations & Management Costs	20-60 USD ha ⁻¹ yr ⁻¹	5 -15 USD ha ⁻¹ yr ⁻¹
Minimum Size	10,000-50,000 ha	100,000- 200,000ha

Box 2. Forest and grassland pathways project example. Estimates of emissions reduced, annual revenue and operations costs are calculated from case studies



*The estimated SOC sequestration rates and livestock management costs were taken from expert opinions, and the revenue derived off the tonnes/ca/hr/yr based on a variable price per tonne CO₂ based on market rates.

2.4. Carbon markets

The most important carbon market for conservancies is the VCM. The VCM was developed separately from Compliance Carbon Markets (CCM)⁴, and has grown rapidly since 2016, with the intention of enabling private organisations and individuals to purchase carbon credits voluntarily, either for corporate social responsibility, offsetting their carbon footprints or for achieving corporate net-zero targets. Many projects already have voluntary buyers of credits lined up, including corporations and philanthropists.

Although international compliance markets still cover more GHG emissions than the VCM, the VCM is growing relative to compliance markets as the demand for carbon credits by private actors increases.

The VCM is much more flexible than the CCM however, the VCM faces some challenges:

- » There is a risk of investing in initiatives that fail to deliver the expected environmental benefits. The voluntary nature of these markets often leads to a lack of standardisation in measuring and verifying carbon credits, contributing to variability in offset quality and the potential for greenwashing, where companies purchase credits more for the appearance of environmental responsibility than for actual emissions reductions.
- » Carbon price fluctuations can affect the stability of funding for long-term projects.
- » The complexity of implementing and verifying projects adds to the costs and challenges, requiring rigorous methodologies and often third-party verification.

Because of the voluntary nature of the VCM, in 2023, the compliance market was trading at almost \$110 per tonne while the VCM was trading at around \$3 to \$5 per tonne. However, credits linked to NCS are becoming increasingly popular - enough that issuance cannot meet demand, and often sell for slightly higher prices.

2.4.1. Carbon markets in Africa and Kenya

In the past Africa was not engaged in carbon markets: India and China accounted for 67% of all credits generated under the Clean Development Mechanism (CDM) while Africa accounted for only 5%.⁵ However, the demand for African-originated carbon credits is growing. Between 2016-2022 the demand grew at an annual rate of 36%. Yet the value of the credits remains low. Large economies, such as India and China, dominate the VCM, and only a small number of African countries and companies have been able to benefit from the VCM. VCM in Africa are fragmented, with a significant number of global players across the value chain. Project developers are generally small-scale and limited in number, with around 100 project developers active on the continent over the past 10 years. Major international companies drive the demand for African credits (Figure 4). Africa Carbon Markets Initiative (ACMI) estimates that the region's participation in carbon markets is below its potential⁶.

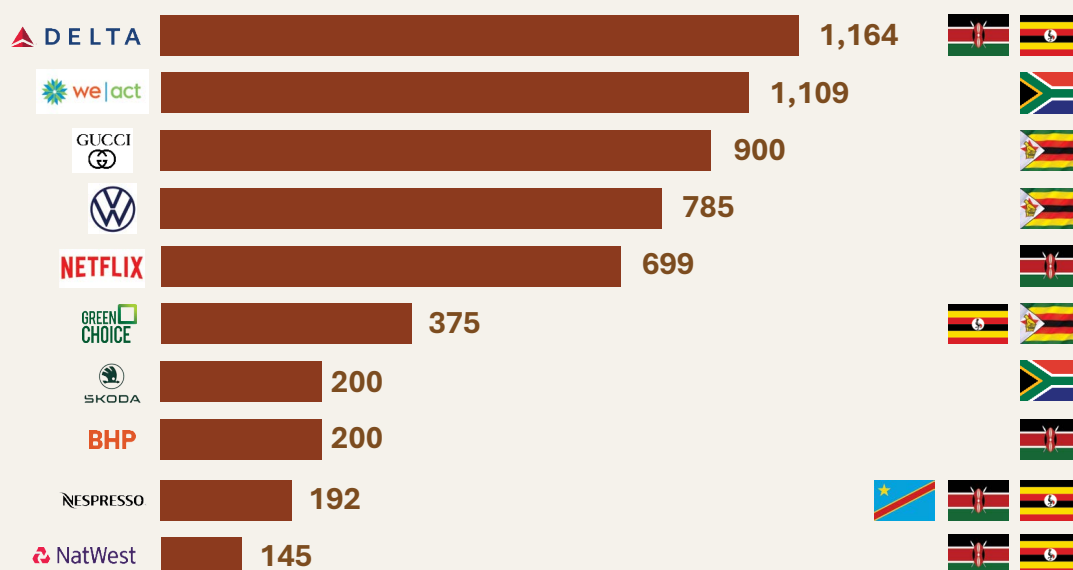
⁴Compliance Carbon Markets are created and enforced by governments as a result of policy or regulation with the aim of regulating carbon emissions within a certain nation or region e.g. the European Union Emissions Trading System (EU ETS).

⁵OMFIF 2022, [Leveraging Carbon Markets to Enable Private Investment](#)

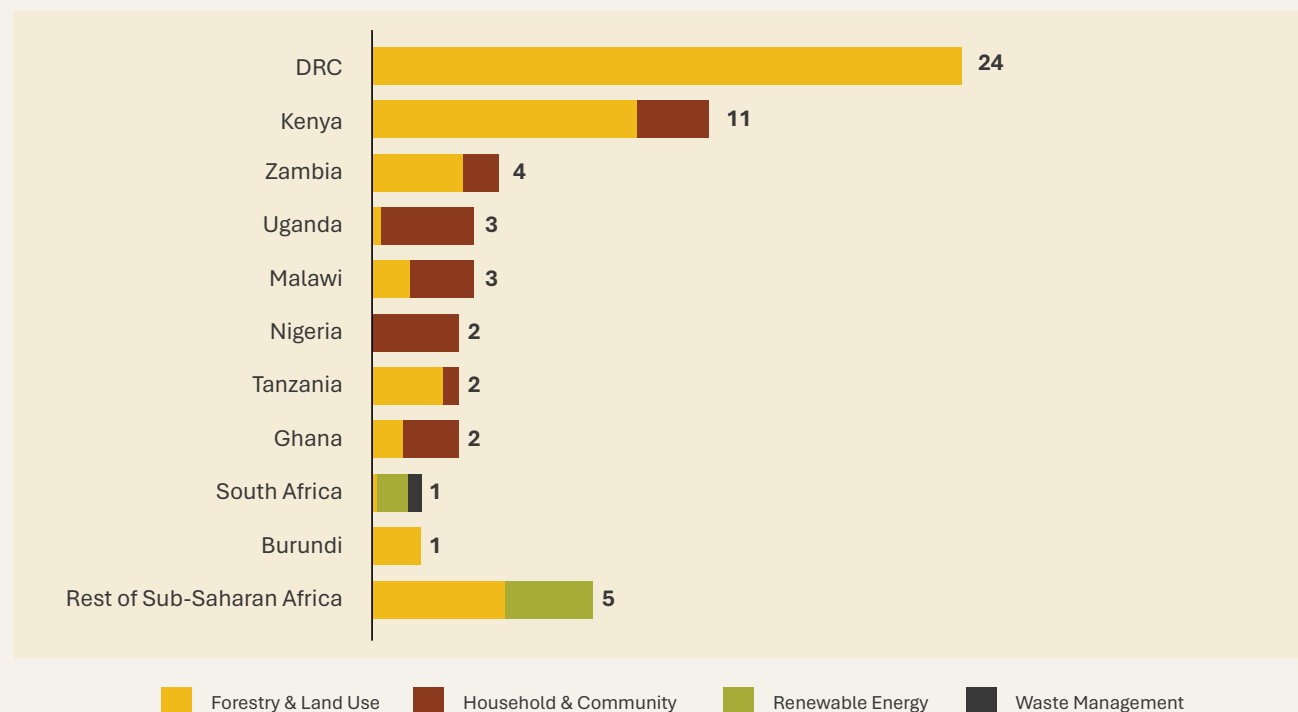
⁶World Bank Group and Kenya Private Sector Alliance, 2024. "A Carbon Market Guidebook for Kenyan Enterprises".

African-origin offsets retired by buyer, KtCO_{2e} 2021

26% of African credits in 2021

Figure 4. Top buyers of African credits⁶

Although nascent, carbon markets are a high-growth area in Africa, with Kenya leading in terms of the number of credits issued (Figure 5).

Figure 5. VCM credits issued for projects in Sub-Saharan Africa in 2022, millions of credits⁷

⁷ World Bank Group and Kenya Private Sector Alliance, 2024. "A Carbon Market Guidebook for Kenyan Enterprises."

- 🌳 Globally, as of 2024, there are 370 NCS projects generating 546,990,002 tonnes of carbon dioxide equivalent (tCO₂e) of GHG emission reductions and removals^{8,9}.
- 🌳 1% of these global emissions reductions and removals are in Kenya.
- 🌳 There are NCS projects registered and ongoing across Kenya under various standards with total estimates of 3,783,304 tCO₂e per year (Annex 1) and 102,580,428 tCO₂e total estimated project emission reductions and removals over their lifetime. These annual emissions are equivalent to the emissions produced by approximately < 1 million passenger vehicles in the same period, a substantial contribution to GHG reductions.
- 🌳 Two other projects have been certified, run their course and have been retired with total estimates of 19,454 tCO₂e per year and total estimated project emission reductions of 598,189 tCO₂e.
- 🌳 22 projects are under development and validation and are projected to have a total of 7,555,758 tCO₂e estimates per year and a total of 260,097,468 tCO₂e over their project crediting period.
- 🌳 The first carbon project in Kenya was the International Small Group and Tree Planting Program (TIST) VCS 001, which was established in 2004¹⁰, as an Afforestation, Reforestation and Revegetation (ARR) project.
- 🌳 Kenya leads the way in East Africa, generating 23% of the continent's carbon credits between 2016-2021.

2016 - 2021 carbon credit issuances by country, MtCO₂e

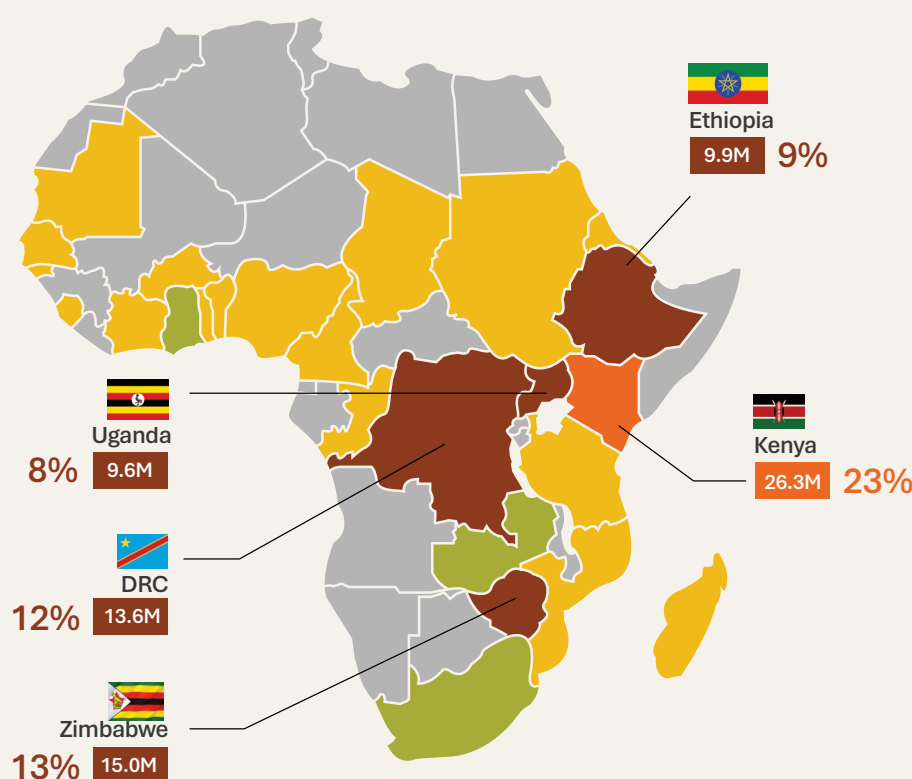


Figure 6. Credits issued in Africa between 2016-2021 (McKinsey & Company)

⁸Under the Plan Vivo Standard (PVS), Verified Carbon Standard (VCS), and Gold Standard (GS).

⁹This is as per the Climate Focus VCM Dashboard

¹⁰ Verra registry

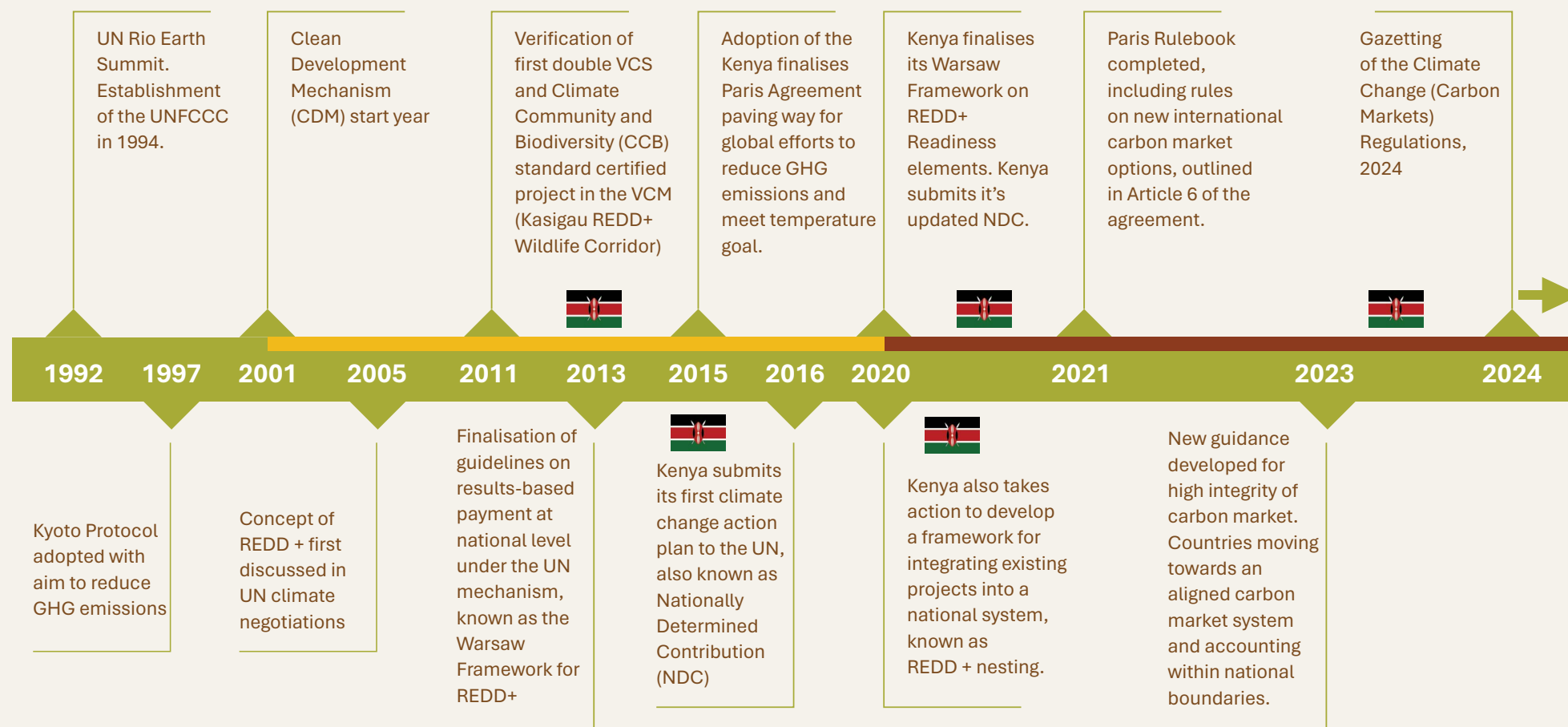


Figure 7: Evolution of the carbon market with a focus on Kenya¹¹

¹¹ The Paris Agreement commits all signatory nations to reduce emissions to prevent severe climate change, aiming to limit global warming to well below 2°C above pre-industrial levels, with efforts to reach 1.5°C. Countries are required to fulfil their National Determined Contributions (NDCs), and may utilise carbon projects for emissions reduction. This necessitates large-scale alignment, such as preventing double counting of emissions reductions and integrating project-level activities into broader programs like Kenya's ongoing efforts since 2020.

2.5. Carbon projects

Carbon projects are complex, requiring key principles, standards, methods and multiple stakeholders. This section unpacks this complexity before **Part 3** lays out how to establish a carbon project on a conservancy. It begins by outlining the key concepts that underlie how a carbon project works; what the key roles are in a carbon project; introducing carbon standards, methods and three case study projects from Kenya and one from Tanzania and then addresses the key elements of a successful carbon project.

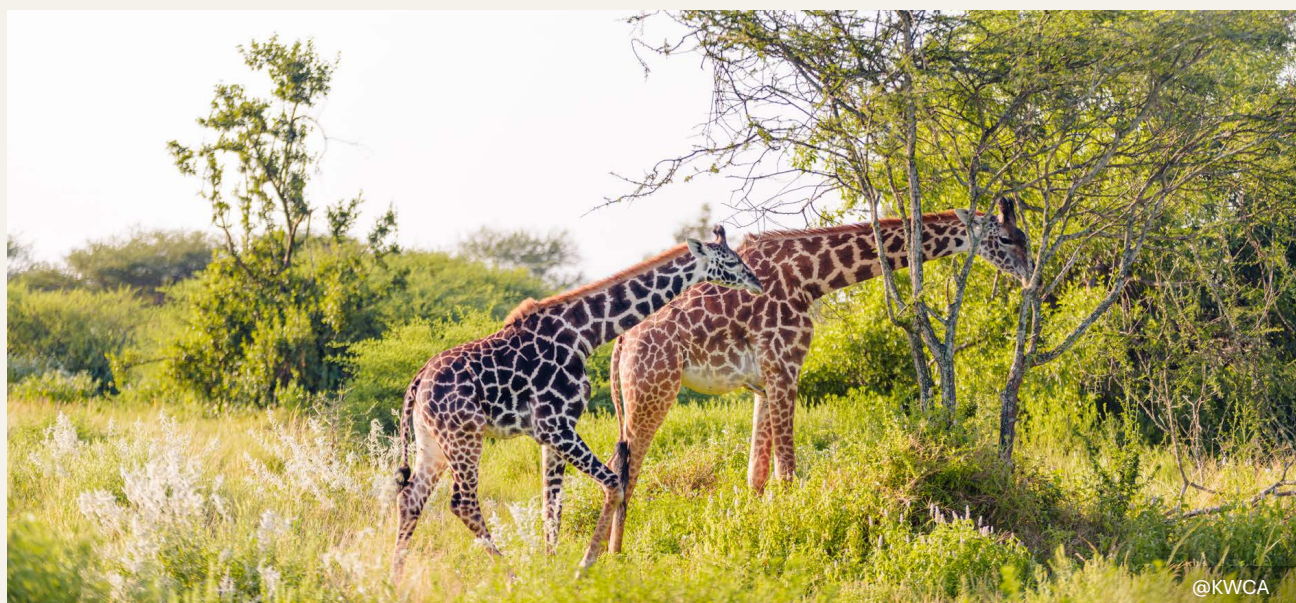
2.5.1. How do carbon projects work?

Payments for improved rangeland or forest health

Carbon markets are a tool to fund climate change action through NCS. Through carbon markets, individuals and organisations pay to protect forests or to support improved rangeland management, reduced deforestation, afforestation and other activities that either avoid carbon being released or remove carbon from the atmosphere, contributing to global efforts to reduce climate change. Any actions by conservancy managers that result in improved forest or rangeland conditions (with more or larger trees in forests, thicker vegetation, or improved grassland cover in rangelands) is likely to store more carbon in the land. This can be the basis for generating carbon credits, using methods to estimate the amount of increased carbon stored through changes in land management.

Projects are long-term

Most NCS carbon projects demand that a conservancy and its members commit to a contractual arrangement that is at least 30 years in duration¹². Children born at the beginning of the process will be adults when the project is completed. This inherently long-term approach means that the activities that are designed and put in place become embedded into the fabric of the societies involved. This inherently long-term approach means that the activities that are designed and put in place become embedded into the fabric of the societies involved and that the carbon sequestration impact of the project has to be permanent - this is a crucial concept of carbon projects and is called ‘**permanence**’ (Box 3).



¹² These are currently the longest legal arrangements conservancies and their members are part of. Conservation leases, in the Mara for example, are a maximum of 25 years in length. Many tourism operations are on much shorter agreements.

Payments are performance-based

There is no reward for simply having trees on your land. **Carbon credits are based on the extra carbon that is stored in the soil or forest due to measurable changes in land use practices.** This concept is called ‘**additionality**’. Additionality is a key concept in the carbon market that ensures the quality of carbon credits (**Box 3**). It means that a project would not have happened without financial incentives from selling carbon credits. This concept is necessary because it helps distinguish projects that truly reduce carbon emissions from those that might have been completed anyway. Proving additionality involves comparing what is happening because of the project to what would have happened without it, which can be subjective and difficult to determine. There are different tests used to assess additionality, such as checking if the project is already required by law, if it is financially viable on its own, if there are barriers that the project overcomes with the help of carbon credits, or if the technology used is already common.

These tests help ensure that projects needing carbon credit revenues for implementation are chosen. For instance, projects that are too profitable without credits or that rely on outdated technologies that do not reduce emissions are not considered additional.



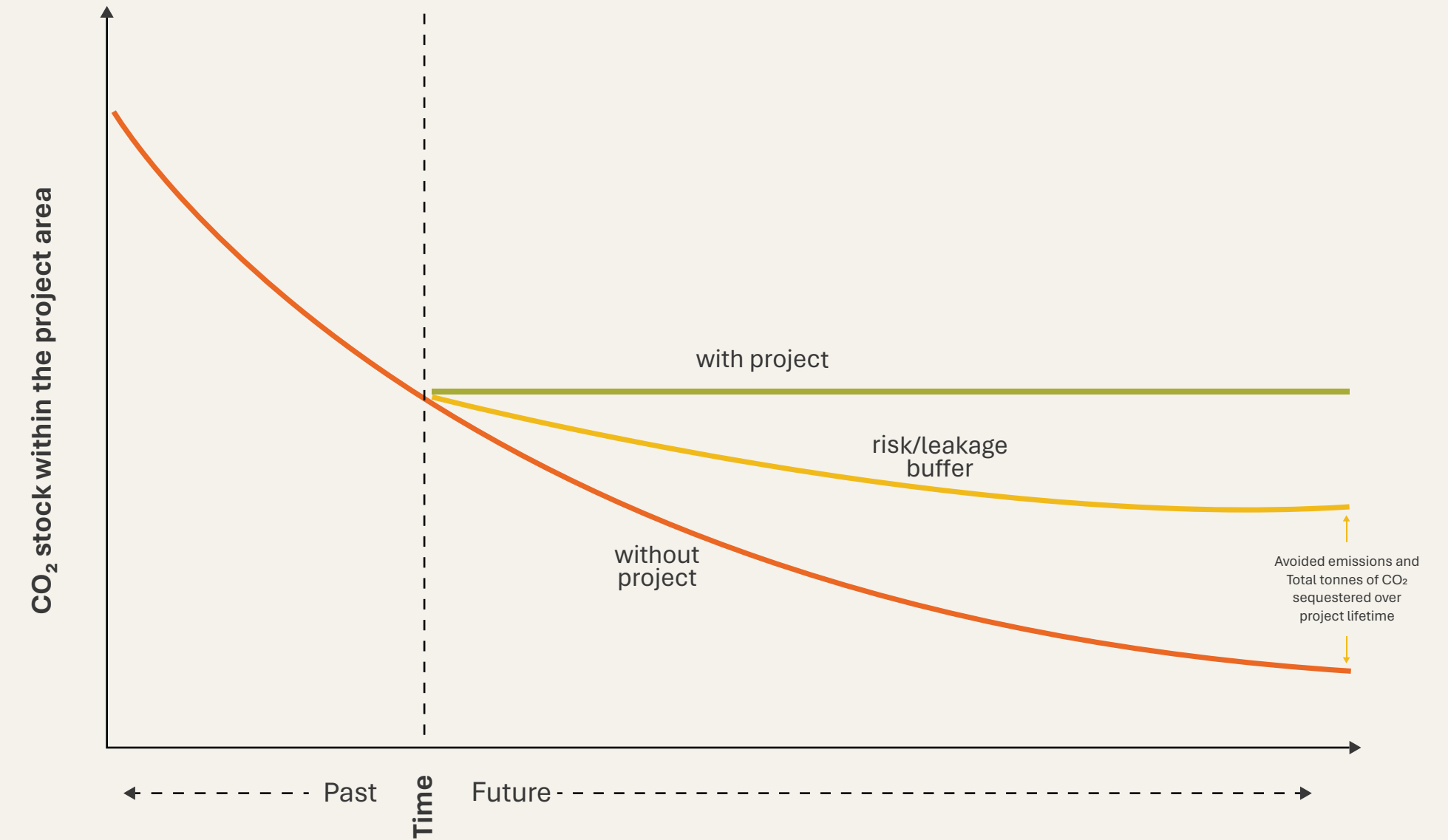


Figure 8: Carbon stock over time in the project area implementing an emissions reduction project.

Along with permanence and additionality, projects have to ensure the two other crucial key principles (Box 3).

Additionality	This is a principle used in carbon offsetting to ensure that the GHG reductions or removals by a project are a direct result of the project interventions and not due to other factors . For a project to generate an impact, it must be additional; this means that the difference between baseline and project scenarios can be directly attributed to the project's activities and the funding through carbon revenues.
Permanence	Permanence means that the carbon sequestration or avoidance/reduction impacts of a carbon project are sustained over a long period (30 years) and are not reversed .
Leakage	Leakage refers to a situation where actions to reduce emissions or increase removals in one area lead to an increase in emissions in another area . e.g. when efforts to prevent deforestation in one area push logging activities to a neighbouring area, thus negating the overall positive impact on carbon emissions.
Double counting	As the carbon markets are a payment for performance mechanism, it is important that the same climate impact performance of a project is not accounted for multiple times, nor is it claimed by multiple parties . Carbon standard registries are established to prevent and avoid double counting from occurring by carefully tracking project performance and the trading of carbon offsets.

Box 3: Key principles of carbon projects

The project will create carbon credits

A carbon credit is a quantifiable, certified unit of reduced or removed CO₂ emission. **One ton of emissions avoided or removed equals one carbon credit**. The emissions from a project are quantified as tonnes of CO₂ equivalent per hectare per year. Carbon credits are issued after a project has measured impact. Carbon credits have an ownership that can be sold for a price. The sale of credits generates a revenue stream for projects.

Carbon credits help companies, countries and individuals meet their carbon emission reduction targets (e.g. net zero targets - where annual carbon emissions are in balance with carbon removals). The better the performance of grazing/forest management, the more carbon that is stored or avoided from being released, and the greater the number of carbon credits generated.

Most of the supply of carbon credits is generated in developing countries and most of their demand is in developed countries.

2.5.2. Key roles in a carbon project

Key roles in a carbon project	
Carbon rights holder	The individual/entity that has legal rights to the carbon e.g. a conservancy. Carbon rights holders must vary and includes rights arising from land ownership where carbon credits are generated or right granted by legal instruments to third parties who are not land owners but whose interventions result to generation of credits, or such rights are assigned or transferred.
Project proponent	The individual/entity that is responsible for running the carbon project over the full 30+ years of the project lifetime, and responsible for managing carbon standard certification and associated requirements; implementing and overseeing project activities as planned; monitoring project impact; as well as general project management. The proponent is the legal owner of the asset i.e. credits are deposited in the proponent's account when issued. Where the project proponent is not the sole rights holder to the carbon, some form of contractual agreement with the carbon rights owner is required. In jurisdictions such as Kenya, where carbon rights are not yet legally defined, the legal land owner or manager will hold this contract with the proponent. There should also be project governance mechanisms that enable rights holders and other stakeholders to have meaningful input into decisions relating to project design and management. The project's governance structure should therefore reflect and protect the rights, roles and responsibilities of all stakeholders, and should empower those whose livelihoods and wellbeing are affected by the project. This is critically important given the multi-decade span of carbon projects. Usually, the project proponent is an institution formed with or in collaboration with the conservancy, other conservancies, and the developer. This institution creates the project documentation, registers the project on the voluntary market with a carbon standard (such as VERRA or Gold Standard) and a method (e.g. REDD), and finds a registered auditor to validate the estimates of how many carbon credits are created.
Project developer	Sometimes the project developer is the project proponent. In other cases, this role transitions to project proponent after the first few verification events. This transition helps build local capacity to understand the project results and keep dependence on overseas consultants to a minimum. It is important to remember that all monitoring reports are subject to third-party auditing so there is no conflict of interest in how the project impact is evaluated.
Project implementers	Responsible for delivery of project implementation activities e.g. conservancy managers, NGO partners. Project implementation costs are funded through the revenues from carbon sales over the full project lifetime of 30+ years.
Project financiers	Carbon markets' pay-for-performance mechanism means that performance will not occur without payment. Therefore up-front financing is required for projects to be solvent and start implementing for impact. Project financiers may provide this upfront capital by forward buying credits at a discounted rate, by providing debt financing (i.e. loans) or by taking a stake in the project through joint venture or equity deals.
Marketing and sales	Credits need to be sold to buyers to generate cash returns to projects. Buyers may be intermediaries and/or end users, using the credits to offset their emissions. Intermediary users may operate on a commission basis to align incentives to achieve the highest price possible in the marketplace. They may arrange offset transactions for a fee (broker) or may buy credits to resell in the future (trader), often on a long-term basis, i.e. agree to buy a certain number of verified emission reductions over five years.

Box 4: Key roles in a carbon project

2.5.3. What are carbon standards and methodology

Each carbon project must choose a standard and a method. A carbon standard is a complete set of rules, procedures, and approved monitoring methodologies under which certified carbon credits are quantified and issued. A carbon methodology is the set of parameters, criteria, and operations needed to calculate emission reductions from a carbon project during its lifetime. The decision on the carbon credit standard and methodology to use affects processes at later stages such as project registration, monitoring and reporting, and markets where the credits can be sold. In [Part 3](#) we outline how to choose the right standard and methodology for a project, [Box 5](#) outlines what standards and methods are and which are available for NCS projects.

Term	Definition	Purpose	Function	Examples
Carbon standard	Sets of criteria and protocols established to ensure the quality, transparency, and integrity of carbon projects. They guide the measurement, verification, and reporting of GHG emission reductions or removals.	To ensure that carbon projects achieve real, quantifiable, permanent, and additional GHG reductions. They help avoid issues like double counting and ensure that projects contribute effectively to combating climate change.	Provide methodologies for quantifying GHG reductions, guidelines for monitoring and reporting, and processes for third-party verification. They also often consider the sustainability and social impact of projects.	<p>VERRA is the largest issuer of carbon credits in the NCS sector. It offers the most varied range of methodologies for land-based projects, including REDD and soil carbon¹³. It administers the Climate, Community and Biodiversity Standard (CCB), which certifies contributions of VCM activities for projects that generate economic, social or biodiversity benefits as well as climate change mitigation.</p> <p>Plan Vivo is renowned for ensuring that carbon projects prioritise the rights and needs of local people, as well as generating carbon credits and protecting natural resources.</p> <p>ART/TREES¹⁴ to formulate and administer standardised procedures for crediting emission reductions and removals from government-sponsored national or large sub-national programs for REDD, and is geared to certify large volumes of GHG emission reductions and removals.</p>
Carbon methodology	Specific procedures and guidelines are used to calculate and verify the GHG emission reductions achieved by a carbon project.	To ensure that the calculation of carbon emissions reductions is accurate, consistent, and scientifically sound. Methodologies are essential for the credibility and quantifiability of carbon credits.	Outline specific steps for measuring baseline emissions, implementing the project, and calculating the resulting emission reductions. They often include formulas, monitoring requirements, and verification procedures.	<p>TIST Program in Kenya monitoring methodology includes¹⁵</p> <p>“Simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities under the CDM implemented on grasslands or croplands” and the associated tools.</p>

Box 5: Carbon standards and methodologies for NCS carbon projects

¹³ Recently VERRA has released its [Jurisdictional and Nested REDD Framework \(JNR\)](#) which allows developers to integrate into National Government REDD accounting, as well as providing a pathway for National Governments to generate emission reductions at the national scale.

¹⁴ Architecture for REDD Transactions, the REDD Environmental Excellence

¹⁵ [CDM AR-AMS0001 Version 05](#)

2.5.4. The role of a conservancy in a carbon project

Conservancies are integral to the success of nature-based carbon projects in Kenya. Their role extends from project conceptualisation through to implementation, involving extensive collaboration with project developers and the community to navigate the complex carbon market.

Carbon projects can be a financial instrument to support conservancies that have the potential to create substantial ecological and societal impact. Income generated from carbon projects can be used to fund community development initiatives like providing schools, health services, water and sanitation services, or local enterprises; or provide individual benefits and payments.

Conservancies and their members must decide together on a fair and equitable process for how they will make decisions, how to share revenue, and what the revenue should be spent on. They must negotiate this internally (and create a benefit-sharing plan - [Part 3](#)), and with the project developer and/or project proponent. Activities that are critical to generating carbon credits, such as improved forest management and grazing management, must be prioritised.

Usually, the project proponent is an institution formed with or in collaboration with the conservancy, other conservancies, and the developer. This institution creates the project documentation, registers the project on the voluntary market with a carbon standard (such as VERRA or Gold Standard) and a method (e.g. REDD), and finds a registered auditor to validate the estimates of how many carbon credits are generated.



Conservancies will:

- 🌳 Be ready and willing to have large-scale social, economic and governance changes to improve natural resource management.
- 🌳 Require the support of a project developer with the technical expertise to create the documentation needed for a carbon project to pass verification and validation.
- 🌳 Understand the financial and legal implications of a carbon project.
- 🌳 Be the key implementers of management actions required for emissions reduction or removal.
- 🌳 Be the key mobilisers of communities.
- 🌳 Work with a project developer, other conservancies, and other technical and practical implementers to create a project proponent that can engage directly or via networks to sell credits and resource funding for the establishment of a project.



A conservancy that is currently implementing or wants to implement activities that are reducing emissions or removing carbon may work with a project developer to create a project, owned by a project proponent (this could include the conservancy and the developer). Project activities need to be documented or designed to follow one of many approved carbon methodologies under a carbon standard. To generate carbon credits a project must be certified following an independent audit. Carbon reduction and removals need to be monitored, reported and verified, again by an independent auditor. In parallel, project developers need to attract and structure investment to help a conservancy implement activities. Credits may be sold by project proponents or governments (with jurisdictional programs) directly to buyers or sold to intermediaries. **Figure 9** provides an overview of how a carbon project works for a conservancy.

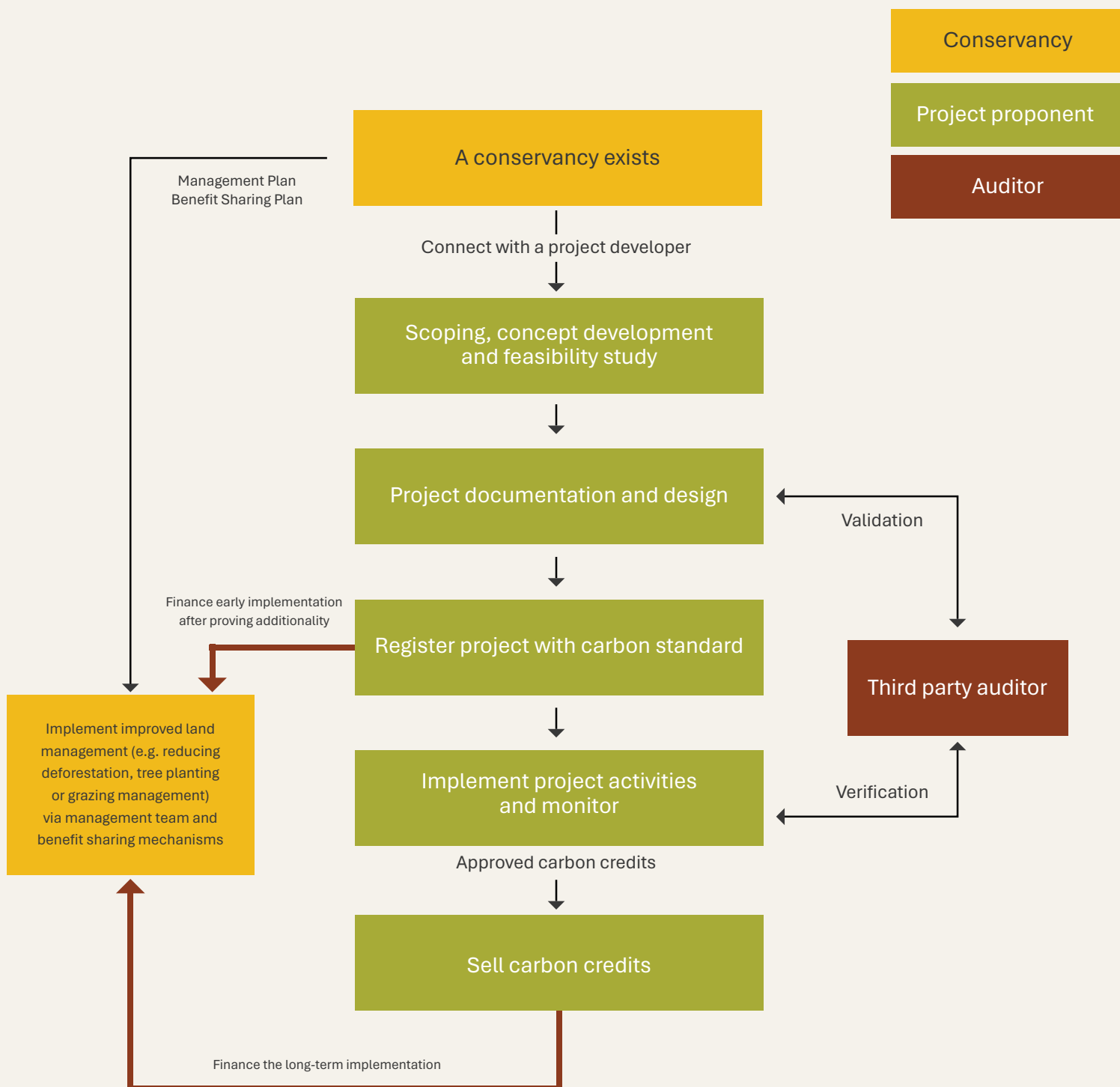


Figure 9. Overview of carbon project development (refer to glossary for key terms)

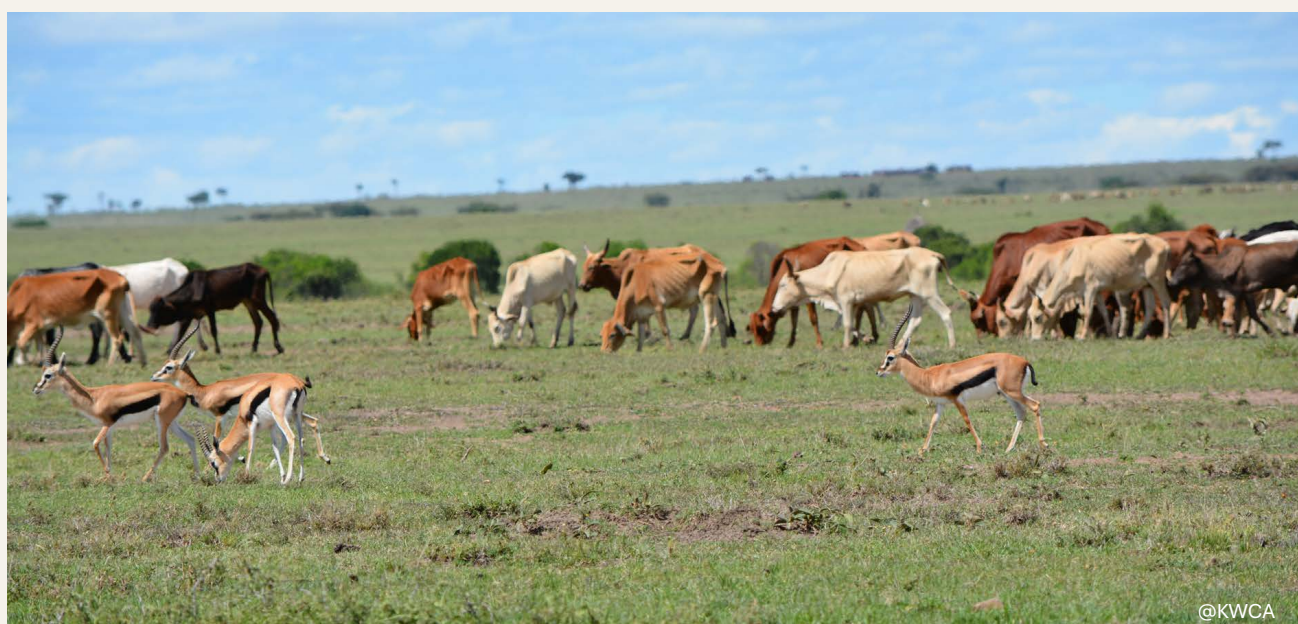
2.5.5. Learning from established carbon projects in Kenya and Tanzania

This section and those that follow provide guidance and lessons informed primarily by two case studies of established Kenyan carbon credit projects, and one project that is under development in Kenya. In addition, we provide a case study from Northern Tanzania, to allow cross-comparison between projects that have been designed and implemented in different ways. Each one is briefly summarised in the boxes below.

The Chyulu Hills REDD Project (CHRP)	
Conceptualisation	2011
Timeline	2013 - 2043 (30 years)
Location and Area	The project area spans parts of three counties (Makueni, Taita Taveta, and Kajiado) and is over 410,000 hectares and occurs on both public and community land. The landscape vegetation ranges from moist tropical cloud forests on the summits to lava forests, woodlands, and savannah grasslands at lower elevations.
Funders	There were some private donations from philanthropists. Conservation International (CI) provided financial and technical support while Wildlife Works provided technical support.
Proponent	Chyulu Hills Conservation Trust (CHCT)
Developers	Conservation International and Wildlife Works
Buyers	Tiffany and Co, Netflix, Apple, Gucci and others. These buyers are largely corporations looking to achieve net-zero from a sustainability and brand perspective.
Estimated CO ₂ Reduction	The activities conducted by the CHCT partners, including fire prevention, rangeland improvement, and protection of forests from charcoal and logging have successfully reduced carbon emissions. Just over 2 million tonnes of avoided emissions in its first monitoring period between 2013 and the end of 2016. The project has achieved validation and two verifications, which have generated about 5 million marketable verified credits. The project will prevent the emission of 37,765,494 t CO ₂ e over the 30-year crediting period by stopping deforestation, forest degradation and grassland conversion.
Standards	Verified under Verified Carbon Standard (VCS) and Climate, Community, and Biodiversity (CCB)
Methodology	The VCS methodology, VM0009
Motivation of Project	To address the threat of deforestation and degradation of the landscape caused by agricultural encroachment, charcoal burning, firewood collection and harvesting of high-value timber for wood carvings and, through the carbon markets, to access additional and sustainable finance to support conservation. CHCT is implementing a variety of activities that address these threats. These include enhancing forest protection, improved rangeland management, community engagement and support, biodiversity conservation, and research and enhanced governance.

Box 6: CHRP case study





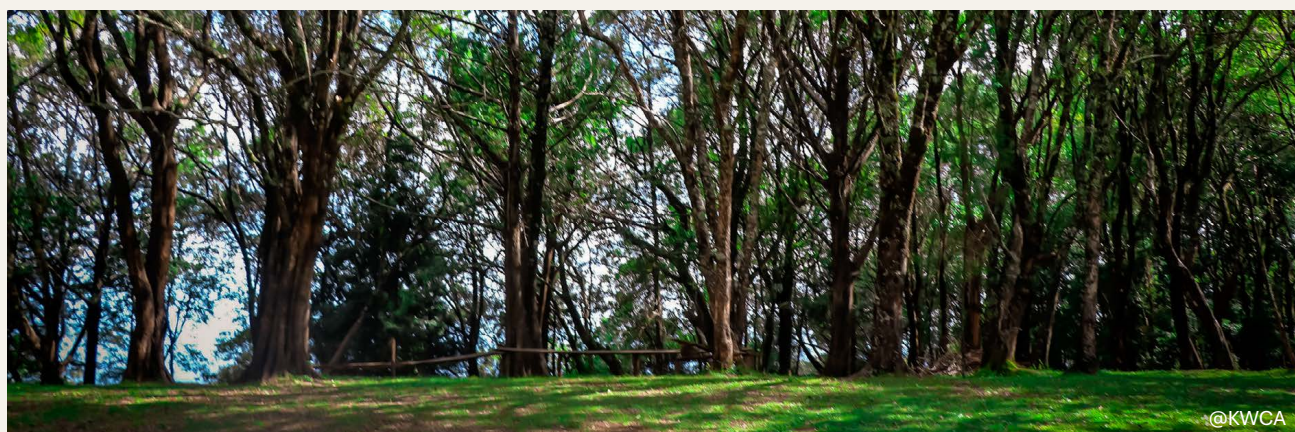
Northern Kenya Rangelands Carbon Project (NKRCP)	
Conceptualisation	2009
Timeline	2012 - 2042 (30 years)
Location and area	14 community conservancies, covering 1.9 million hectares of savanna grassland extending northward from the northern slopes of Mt. Kenya
Funders	USAID, Native and Soils for the Future. Native is the NKRCP marketer, primary project developer, and part financier. TNC provided conceptualisation funds and Native provided further funding due to the protracted verification/validation process.
Developers	Native and Soils for the Future.
Proponent	NRT
Primary buyers	Buyers (listed in the VERRA registry) include Mars, Netflix, and Respira. Native has exclusive marketing and sales rights over the project and they sell directly to the end buyer and do not forward sell credits from the project. Respira is the only buyers who are currently allowed to forward sell (broker) the credits based on a very strong and positive historical relationship between themselves and Native.
Estimated CO ₂ reduction	50 million tonnes removed in 30 years.
Standard	Verified Carbon Standard (VCS) certified by Verra. Awarded Triple Gold status by the Climate, Community, and Biodiversity Alliance (CCBA) due to wildlife and communities.
Methodology	VCS, VM0032 standard, developed by an external consultant as the first methodology for determining soil carbon globally. This entailed significant cost and time due to the vast landscape, with its social and political complexity.
Motivation of project	In response to landscape degradation in the region. The project's core objective is carbon sequestration through improved rangelands management. This is achieved through conservancy members adopting rotational grazing and livestock bunching to restore degraded areas and improve the quality and availability of pasture. Improved grazing generates carbon revenue alongside benefits like increased pasture, improved family income from the sale of healthier livestock, drought prevention, reduced erosion, generation of a new long-term sustainable income stream, improved landscapes and biodiversity, and enhanced protection of four endangered species living in the project area.

Box 7: NKRCP case study

The One Mara Carbon Project (under development)	
Conceptualisation	2019
Timeline	2020-2060 (minimum 40 years)
Location and Area	The project is located in Narok county and covers the existing and potential community conservancies in the Greater Mara Ecosystem as defined by the Greater Mara Ecosystem Management Plan.
Funders	Ahueni and Conservation International. Both as not-for-profit entities.
Proponent	One Mara Carbon Ltd by Guarantee (currently represented by MMWCA). Proponent to be 100% owned by its member conservancies.
Developers	One Mara Carbon supported by Conservation International, Ahueni and MMWCA.
Primary Buyers	To be confirmed.
Estimated CO2 Reduction	Approx. 500,000 tonnes per year
Standard	VCS and CCB
Methodology	VM0032
Motivation of Project	<p>The conservancies of the Maasai Mara Ecosystem represent a unique land use strategy whereby private land owning community members lease their lands to a conservancy in return for a regular monthly income. The conservancy therefore needs a long term sustainable business model whereby it can generate revenues from conservation as a land use. Even though the conservancies are dedicated to conservation, land degradation continues at scale due to pressures from livestock grazing and competing land uses. Tourism provides a strong backbone to this strategy but tourism is not able to cover the additional management costs required to restore the landscape. Accessing carbon markets provides a new financial pillar to this conservation model that will ensure restoration practices can be adequately funded and helps to ensure landowners are fairly compensated at prevailing land rates for choosing conservation as their primary land use strategy. The carbon project does not stop livestock grazing, it merely supports more sustainable practices, thus ensuring both financial and cultural value for communities while resisting encroachment from agriculture, over grazing and charcoal production.</p>

Box 8: OMCP case study (under development)

¹⁶ Certificate of Customary Right of Occupancy - used to formally allocate parcels of village lands to individuals or groups in Tanzania



The Yaeda-Eyasi Landscape REDD Project	
Conceptualisation	Established/operational in 2011, Yaeda I REDD project was first introduced in October 2010 in Tanzania and was validated in 2012. Yaeda II was implemented in 2016, expanding to include the pastoral use CCRO ¹⁵ of Yaeda Chini village. This extension was validated in 2018. In 2020, the Yaeda-Eyasi project encapsulated the Yaeda Valley project area and extended it into 10 new villages.
Timeline	2012 - 2032 (20 years)
Location and Area	Yaeda-Eyasi Landscape REDD Project works with hunter-gatherer Hadzabe and pastoralist Datooga communities in 12 villages in the Yaeda Valley and Lake Eyasi Basin. Altogether the project covers an area of 110,527ha.
Funders	As this was the first project developed by Carbon Tanzania (CT), the founders used personal funds and time for the design, development, and early implementation of the community-led REDD project. Technical work, including satellite analyses and understanding socio-economic dynamics, was provided by strategic landscape partners (TNC, The Dorobo Fund, Ujamaa Community Resource Team). The original project expanded from two to three participating villages (Domanga, Mongo wa Mono, and Yaeda Chini) with a USD 100,000 loan from an early stage social impact investor. Recent expansion and re-validation was funded by a European carbon project developer and credit reseller.
Proponent	Carbon Tanzania
Developers	Traditional leaders, the elected village governments and community members, Carbon Tanzania (CT), Ujamaa Community Resource Team (UCRT).
Primary Buyers	European and US based carbon credit resellers which constitute approximately 95% of all carbon credit purchases from the project. CT established a small base of local Tanzanian buyers in high-end tourism, allowing travellers to offset emissions with Yaeda Eyasi carbon credits.
Estimated CO ₂ Reduction	The project avoided 177,284 tonnes of CO ₂ emissions annually as of 2021.
Standard	Verified by Plan Vivo, awarded the UN 2019 Equator Prize, and acknowledged as an NCS Lighthouse.
Methodology	The Yaeda-Eyasi project design uses updated baseline and monitoring methodologies, following Plan Vivo approved approaches.
Motivation of Project	To mitigate deforestation-related emissions while fostering local development and habitat conservation. The project, funded through carbon revenues, actively supports anti-poaching efforts, monitoring initiatives, educational programs, and medical services. By doing so it ensures that all residents, including the hunter-gatherer Hadzabe and pastoralist Datooga communities, receive tangible benefits from the project.





Box 9: Yaeda-Eyasi REDD project case study

2.5.6. Key elements for a ‘successful’ carbon project

This guide considers a ‘successful’ carbon project to be one that brings social, economic and ecological benefit to a conservancy. **Box 10** outlines the characteristics of such a project. These characteristics are grouped into the following broad elements: governance, safeguards, legal and policy and financial. This section lays out these elements for conservancies to consider.

Characteristics of a ‘successful’ carbon project

A carbon project that brings social, economic and ecological benefit to a conservancy has:





-  A clear understanding of the forces that are causing carbon emissions from the land (forest loss/degradation/land use change) and the actions that will result in changes to carbon emissions or removal. A project must be clear about how it will bring about that change, and who will bring that change about.
-  Strong support from fully informed conservancy members, neighbours and others impacted by the project.
-  Strong, respectful, transparent partnerships for technical, financial, political and management support.
-  Motivated and skilled staff and partners.
-  Patient, continuous, inclusive consultation of all stakeholders.
-  Respect and consideration of people’s rights, customary rules and governance by traditional institutions.
-  Clear and non-contested land boundaries and rights.
-  Co-created, equitable and transparent sharing of benefits.
-  Monitoring system in place to measure impact on society, biodiversity and climate.
-  Adaptive to changing social and ecological needs of the project.
-  Politically and legally engaged and up to date: with strong local government links and informed of regulatory evolution.

Box 10: Characteristics of successful carbon projects

Element 1 - Governance

What is the governance structure of a carbon project? A governance structure identifies the roles of each stakeholder within the carbon project, their responsibilities, and the process for making and recording key decisions throughout the project’s lifetime. It also provides clarity on how conflicts are resolved and how to adaptively manage the flow of project resources, risks, responsibilities, and benefits between stakeholders.

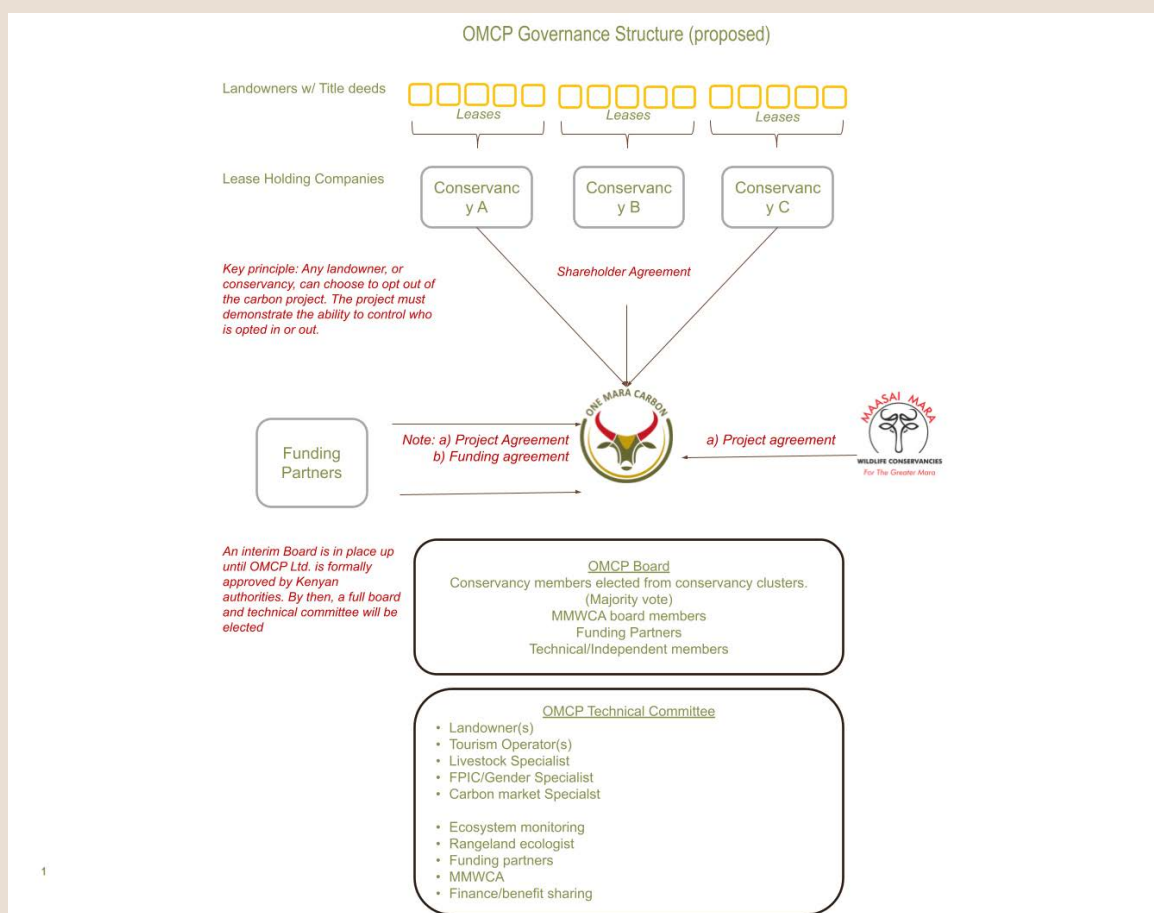
The principles of a governance structure are that it must be:

-  Designed through a participatory process among all relevant stakeholders.
-  Transparent to all participating actors.
-  Equitable.
-  Effective.

The most difficult elements of creating a carbon project often lie within the governance of the conservancy, and understanding this is vital to ensure that a conservancy can successfully engage in the project. **A conservancy should ensure that they are adequately represented at the project proponent level, with a clear understanding of roles, responsibilities, and transparency of the project** (see **Box 11** for an example governance structure).

The One Mara Carbon Project (OMCP) is currently under development and is a listed project in the Verra pipeline. Its governance structure has gone through a thorough process of co-development with stakeholders, and was agreed on in 2024 (Box 11).

OMCP is being formed as a Company Limited By Guarantee. This means that the owning parties of the project are the conservancies. OMCP will be the project proponent. The project proponent is the legal owner of a carbon project with the rights and obligations associated with transacting in carbon markets. Carbon rights sit with the landowners, therefore OMCP has created a governance structure where they are the beneficial owners of the carbon project through their respective conservancies. This structure helps ensure a transparent transfer of carbon rights from the landowners via lease to their respective conservancies and from the conservancies to OMCP via a membership agreement. It also helps ensure transparent distribution of benefits back towards landowners. Financial partners, investors and technical supporters can play an important role in developing a carbon project and while OMCP is very conscious of the need for this support, ownership of carbon rights remain with landowners. Maasai Mara Wildlife Conservancies Association (MMWCA) is also a very important stakeholder in the ecosystem and has been granted board positions to help provide oversight for the project. This will allow MMWCA to maintain a level of independence from each of their member conservancies and to help provide mediation between member conservancies. OMCP is establishing a competent technical management committee which will be tasked with the executive functionality of project operations.



Box 11: OMCP governance structure

Element 2 - Social safeguards and benefit sharing

Carbon projects are legally-binding, long-term behaviour change projects. This is a significant commitment for conservancy members/communities. The project must be co-designed with communities to create behaviour change that is genuine and long-term. Carbon projects require the owner/members of the carbon project to do something differently on their land that results in avoided emissions or increased sequestration. Sometimes those new practices may be untested or unproven – so the impacts on their yield, incomes, and livelihoods may be uncertain compared to the way they are currently managing the land. Owners/members are putting a large portion (if not all) of their land and livelihoods – into the project. They need to commit to continuing those practices for 30 years. Furthermore, carbon projects may impact the lives and resources of many people or organisations beyond the owners/members. Finally, as large sums of money are being passed between parties, the risks and social complexities are higher.

Carbon markets are increasingly facing criticism about negative social impacts of carbon projects which undermines both public and buyer confidence in the carbon market. Criticisms include the negative social impacts of carbon projects, including forced relocation and exploitation of indigenous people, land grabbing, predatory contracts and terms, and non-transparent or unfair benefit-sharing arrangements.

Carbon markets are increasingly facing criticism about negative social impacts of carbon projects which undermines both public and buyer confidence in the carbon market (Box 12).

Verra's Suspension of North Kenya Rangelands Carbon Project (NKRCP) and Kasigau Corridor REDD Project in 2023

- » Concerns over human rights abuses led to the temporal suspension of further credit issuance.
- » Concerns for the NKRCP included
 - * Insufficient consultation with communities, particularly reliance on conservancy boards.
 - * Lack of grievance mechanisms.
 - * Unfair revenue sharing (questioning the 20% of revenue for conservancy operations and NRT grazing plans).
 - * Threatening livelihoods and cultural integrity through new grazing practices.
- » The Kasigau Corridor REDD Project was put on hold due to:
 - * The allegations of sexual and physical abuse by the project proponent.
- » Both projects conducted third party investigations to the claims and the findings and remedial actions were shared publicly.
- » Verra investigated both projects while they were on hold, and the NKRCP was reinstated at the end of 2023 and the Kasigau Corridor REDD Project in early 2024.

Box 12. Suspension of NKRCP and Kasigau Corridor REDD Project. See footnotes for references. ^{17, 18}

¹⁷ Made by Survival International and SOMO

¹⁸ <https://www.wildlifeworks.com/post/update-on-kasigau>

Arguably one of the most important questions to agree on is how carbon revenues that are generated from project activities will be allocated and managed, and the benefits shared between stakeholders. The term ‘benefit sharing’ can be misleading, as it implies that beneficiaries are passive recipients of remote benefits. **In carbon projects, beneficiaries have to generate performance and thus carbon credits¹⁹.** The

benefits earned may be monetary or non-monetary. Multiple stakeholders, from landowners to project implementers to monitoring teams to investors, may have a claim on carbon revenues or credits. Benefit sharing is often a very delicate matter and must be approached with consideration, tact and transparency. It is important to strike a delicate balance between defining benefit sharing early on, yet also important to manage expectations of the stakeholders. **Box 13** lays out the key principles for benefit-sharing. The benefit-sharing structures for the case study carbon projects are outlined in **Boxes 13,14,15 and 16**.

Key principles for benefit-sharing are:
Be based on a thorough understanding of the context: There is no one size fits all model.
Identify the beneficiaries and their needs: Those contributing directly to generating or sustaining emission reductions and removals, those who have historically managed land or contributed to avoided emissions in the project or program area, and those who require incentives to contribute to mitigation goals. Negotiations should begin with a clear understanding of the beneficiaries’ resource rights, needs and priorities, and what the barriers are to their participation. ‘Beneficiaries’ can include local governments, for example in the NKR.
Be based on thorough social consultation: These include sensitisation, co-design and agreement and free-prior informed consent (Box 23).
Be developed transparently: Reveal risks, challenges and rewards of mitigation activities, as well as any conflicts of interest, so that expectations are managed openly.
Be ongoing and iterative: Through frequent, extensive consultation so that beneficiaries’ needs are met and the benefit-sharing mechanism can evolve.
Be linked to mitigation action: Maintaining links to the payment for performance structure.
Mitigate inequalities: Avoid elite capture, exclusion or exacerbating social inequality.
Be well budgeted for: Designing a just, fair and effective benefit-sharing mechanism is an ongoing, thorough process and must be properly accounted for. Engaging existing institutions can help reduce start-up costs.
Be just and accountable: Have clear whistle-blowing and dispute resolution processes.
Be reflective of different types of costs and “investment contributions” by different stakeholders: Different investment contributions include the amount of land that conservancies put into a project, as well as cash investments made by developers, which is often not accounted for. Project costs also include the opportunity costs or minimum willingness to participate for communities and/ or land owners. No profits should be taken by any party before all project costs have been covered.
Avoid fixed percentages: Because a % share of revenues might be fair at \$5 tCO ₂ e but not at \$10 tCO ₂ e due to fixed costs structures of projects. Stakeholders’ returns should be proportional to the profits of the project, but not in a linear fashion. Entitlements to percentages of profits should be on sliding scales, so as to allow the project to survive when carbon prices are low and to build up reserves when they are high. This can become a highly charged issue in communities, so benefit sharing structures of other projects should be investigated to learn from their successes and failures.
Align with developing legislation on benefit-sharing

Box 13: Principles of benefit-sharing

¹⁹ [Beyond Beneficiaries: Fairer Carbon Market Frameworks](#)

The Chyulu Hills REDD Project (CHRP)

The benefit-sharing model was designed through a multi-phase consultative process. As an impartial actor in the landscape, Conservation International facilitated this process.

Several rounds of consultations, first individually and later collectively with all partners, were undertaken, and a model was proposed for adoption by the Chyulu Hills Conservation Trust (CHCT) Board. As a result, the benefit sharing follows a stepwise approach in which finance gets divided between: the operational costs which ensure the continuation of the project, landscape-level interventions that benefit all actors, and the majority of the funds are allocated by the Board based on strategic priorities and threats.

A fixed funding formula was purposefully avoided to allow the Board to manage adaptively and respond to changing strategic priorities. A grant management process has been established that allows project partners to identify their funding priorities, but also ensure that funding is applied in a way that supports the goals of the REDD Project. This includes funding, for example, firefighting equipment, employment of local staff as rangers, teachers or nurses, livestock management, or enhancement of educational or health care facilities, amongst others. The funds are transparently administered through the grants management process by the CHCT, and delivery is appropriately monitored. It should be noted though that a flexible funding formula requires robust governance to avoid abuse.

Box 14: CHRP benefit sharing

North Kenya Rangelands Grassland Project (NKRGP)

The benefit-sharing arrangements between the project developer Northern Rangelands Trust, Native and conservancies were agreed through extensive meetings at the conservancy, village, zonal, board and leadership level. NRT had consent and waiver forms from each of the conservancies assigning their carbon rights to be represented by NRT and giving them permission to enter into a benefit-sharing arrangement on their behalf.

Of the net carbon revenue (which comes after the deduction of all project costs, these include Native's development, validation, verification and issuance, marketing and implementation costs and NRT's project management costs): 40% of the gross sales revenue supports conservancy operations and 60% benefits the communities/conservancies through the Carbon Community Fund (CCF).

For the 60% of the gross revenue, this has been divided to provide sustainable cash flow to conservancies for three consecutive years (to reflect the revenue-generating period of 2013-2016). Each annual 'slice' is divided equally 15 ways (each of the 14 conservancies and then 1/15th remains as a financial buffer for the project to protect financial revenue flows in times of market downturn or a lower crediting period).

It was agreed by the conservancies themselves that 5% of the revenue to conservancies be paid to their respective county government as an in-kind "levy", awaiting formal policy/legislation in Kenya.

The 40% of gross revenue that is used to cater to core conservancy operations costs is disbursed at the year's start, while the 60% that is allocated to community projects is disbursed over the course of the year as the community projects are agreed upon. These projects are approved by the communities themselves through thorough consultative processes. The Carbon Project Oversight Committee (CPOC) oversees the disbursement of community funds to ensure due process is followed, and accountability and project standards are met.

Box 15: NKRGP benefit sharing

One Mara Carbon Project (OMCP)

The decision on the final benefit-sharing model is still pending within OMCP and will be ratified at the first constitutional meeting of OMCP Company Limited by Guarantee. However, the models under discussion lean heavily toward allocating the majority of net income to landowners, who hold carbon rights and are primary contributors to carbon credit creation. Additionally, it is highly likely that a specific portion will be allocated to women, youth, and people with disabilities.

Box 16: OMCP Benefit sharing

The Yaeda-Eyasi Landscape REDD Project

\$\$\$	Total Annual Revenue - from payments for 'credible' tCO ₂ avoided emissions in the project area		
%	20%	20%	60%
	Project Developer	Implementor	Village/Community
Actor	Carbon Tanzania	Domanga, Dumberhand, Endamaghan, Endarywish, Endesh, Eshkesh, Jobai, Mbuganyekundu, Mikochoeni, Mongo wa Mono, Oangdend and Yaeda Chini	
Functions/Responsibilities	Project expansion Administration overheads Reinvestment Financial Ppanning Project prospecting GoT policy monitoring Market Research	Aboveground biomass survey work Verification POD costs Baseline establishment - satellite data, bird/mammal surveys Monitoring	Village Game Scouts (VGS) Plan and overseas village development projects Cooperation and planning with partner organisations (e.g UCRT) Ecological monitoring Reporting By-law enforcement Pay 50% salary of the Yaeda-Eyasi Manager

The revenue from the sale of the credits is to be shared between the participating villages and communities and Carbon Tanzania. The village/community payments are split between the community owners of the 18 participating Community Conservation and Rights of Occupancy (CCROs) and land use areas, according to the forest area contributed to the project.

The village and communities have also decided to give 10% of their payments to their district governments, but this is not a required part of the project's revenue sharing. The payments are results-based, according to the activity monitoring outlined.

Carbon Tanzania will manage all revenue flows from the year-on-year sale of credits. They will then make payments to the community every six months based upon annual monitoring results as outlined in the community sale agreement.

These payments will be deposited directly into the village accounts and community funds accounts and dispersed according to the percentages shown in the revenue sharing agreement and community agreement. Whilst only the Hadza have community accounts, both villages and community groups may choose to open specific accounts. Four signatories are required to access the money in either the village or Hadzabe community accounts. In the Hadzabe community bank accounts these consist of a Hadza chairperson plus three other community signatories.

The salaries for the Village Game Scouts (VGS) will be paid out of the community division of the revenue. Carbon Tanzania will retain 40% of the revenue. The Carbon Tanzania share of the revenue will cover project implementation costs such as those associated with project development, certification, the sale of credits, annual monitoring of all variables and reporting, and verification.

Other benefits: To spread benefits throughout the target group, different community members are being and will continue to be trained and employed as VGS and responsibilities will rotate among willing participants.

Box 17: Yaeda Eyasi REDD project benefit sharing



@Ethan Daniels/The Nature Conservancy

Element 3 - Legal and policy

Carbon rights

Carbon rights in Kenya arise from principles of property ownership and access to benefits - there is no specific provision on carbon rights ownership. The property rights are in relation to storage of carbon in soil, trees and land; and rights to sequester. Ownership rights may then be inferred from Constitutional provisions and various laws on the management of land, natural resources and environmental services. Key considerations for assessing rights to carbon in NCS projects include:

- 🌿 The category of land (public, private or community).
- 🌿 The nature of interest granted in respect of the land (absolute proprietorship, lease, licence).
- 🌿 Any limitations on ownership rights in respect of the land and carbon.

Carbon rights can be transferred by contract to a third party (e.g. to investors or project developers). This means carbon rights as property rights can be assigned, leased or licensed. This is especially important to protect the land owner in the context of a carbon project in which an outside entity helps to facilitate the generation of emissions reductions and removals to be traded on the carbon market.

Furthermore, if any project proponent who is not the landowner is to be awarded any legal or beneficial rights, title or interest to the emission reductions, the entire process must be done in accordance with Kenya's contract law and statutes. The rightful community representatives must be the ones signing the contract, and they should do so under the principles of FPIC ([Part 3, Box 23](#)).

Any contract regarding carbon rights within a carbon project should be drawn up by lawyers with expertise in the carbon credits market and should be checked against any evolving laws, Government circulars, advisories and guidance, with the full understanding of all engaged parties and representatives.



@Baringo County Conservancies Association



Carbon legislation and policy

Carbon projects exist because there is a voluntary market interested in the product (i.e. carbon credits) generated by those projects, however, they are – and will increasingly be – impacted by national policy and regulations. Kenya has published the Climate Change (Carbon Markets) Regulations, 2024 which give effect to the Climate Change (Amendment) Act 2023²³ which amended the Climate Change Act 2016, a significant step towards the implementation of the carbon projects and participation in the carbon market. The regulatory requirements for carbon projects are evolving in Kenya, so it is important to keep monitoring them as they unfold. Below are a few elements to be aware of:

- 🌿 **Regulations:** Governments are designing new carbon market regulations to align all their carbon activities within their jurisdictions. This includes rules on enhanced coordination, the need to obtain government approval to proceed with the project, and revenue-sharing provisions, amongst others.
- 🌿 **Article 6:** The Paris Agreement's carbon market infrastructure and rules may or may not impact the VCM in specific countries. This will be subject to Government decision. It will be important to follow Government decisions and to ensure no double-counting between countries where credits are generated and countries where credits are retired.
- 🌿 **National registry systems:** Governments are designing national registry systems. Sooner or later, VCM credits may need to be recorded in these registry systems.
- 🌿 **Jurisdictional approaches:** Countries are also exploring jurisdictional approaches, especially for creating baseline rates of deforestation for REDD forest protection projects. Stand-alone projects may need to be nested – or integrated – into the jurisdictional approach by using prescribed deforestation baseline rates determined across a country.

²⁰ [The ClimateChange Amendment Act No.9 of 2023](#)

Element 4 - Financial

Funding carbon projects

Funding is largely the responsibility of the project development partners, not that of the conservancy. However, all financing structures and agreements need to be carefully thought through by project proponents with the support of experts; and decisions should be based on clear analyses of the financing needs for a project, considering costs, revenues, cash flows and risk analyses.

For best practice, the conservancy should ask for technical and legal support from third-party partners including regional associations, KWCA or conservation organisations. They should also ask for all project documentation including development costs, implementation costs, proposed financial management and legal structuring. Understanding project risks to the conservancy and the investor and the project investment structure and potential benefits to the conservancy and investors is also crucial.

Carbon projects have a fundamental financing challenge: to secure the upfront investment to enable them to establish the viability of a carbon project and cover the certification and first verification costs. This can create an opportunity for manipulation by unscrupulous speculators who promise great riches through a carbon scheme; but when the analyses are done and the forecasts are lower than expected, conservancies may have incurred debt.

There are four primary ways for a conservancy to access this finance:

- ✿ **Grant funding** - the project will not bear the burden of repaying a loan, and sales revenues will immediately be available. The commercial finance sector usually considers such work too high risk, due to uncertainty of whether a project will achieve validation at all. Therefore some charitable and large donor funds (including Overseas Development Aid) are specifically geared to such projects.
- ✿ **Loan or project financing** - A loan designed to cover pre-issuance costs of the project could be sought from any commercial lender (bank, financial institution) but, due to the lack of physical assets attached to a land-based carbon project, many of these lenders will find it hard to secure their loan. A loan can also be secured from a buyer in the VCM. A company or reseller who is keen to secure access to the future inventory from a project may be willing to advance a loan to the project proponent to cover the development costs. The funds will then be paid back out of the agreed payments for the purchase of the future generated credits, ideally following a schedule that ensures that cash flow to the conservancy from sales is not affected in the early years of implementation.
- ✿ **Prepayment** - This will allow a VCM buyer or reseller to agree at an early stage prices for the credits, and likely will also involve the pre-paid credits being priced at a significant discount.
- ✿ **Investment** - Where a project financier provides upfront working capacity for a project in return for a share of the project revenues or carbon credits. Agreements often have a joint venture or revenue-sharing structure, rather than offering an equity stake.

Northern Kenya Rangelands Carbon Project (NKRCP)

NRT, TNC, Native and Soils for the Future provide funding and financing for the project. Native are the NKRCP marketer, they manage the carbon certification process and they get a share of a part of the revenue at a predetermined rate.

Box 18: NKRCP investment

OMCP financing

Ahueni are providing financing for the project. They are also providing marketing services of the generated credits from the project.

Box 19: OMCP financing

The Yaeda-Eyasi Landscape REDD Project

As this was the first project developed by Carbon Tanzania, the funding model involved the founders funding all feasibility work, initial meetings, community sensitisation sessions and the development of technical documents from their own pockets, or using their own time to complete the various tasks involved in the design, development and early implementation of a community-led REDD project.

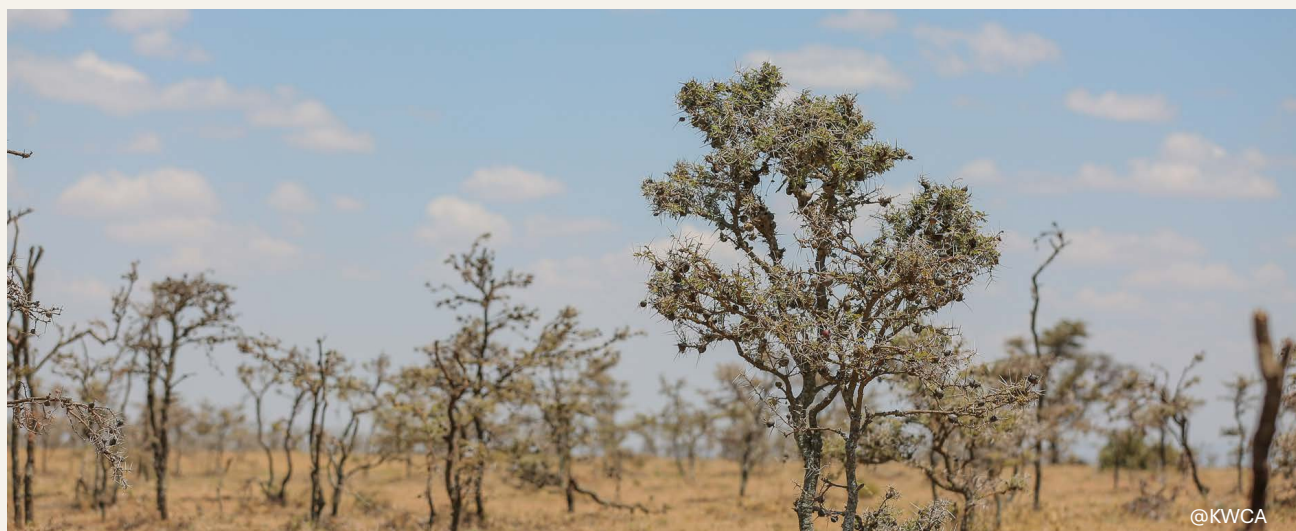
Technical and other work associated with creating satellite analyses of the deforestation patterns in the region, understanding socio-economic dynamics of the participating communities, sensitising communities to the proposed project design and activities, was provided by strategic landscape partners (TNC, The Dorobo Fund, UCRT), which greatly reduced the need for cash flow to pay for expensive professional services – **this speaks to the value of developing strategic partnerships with organisations whose objectives align with both the participating communities and the project developer.**

The expansion of the original project from two participating villages to three was funded by a loan (US\$100,000) from an early-stage social impact investor.

The more recent project expansion and re-validation was financed using funds that were supplied by a European carbon project developer and credit reseller who provided funds in the form of pre-payments for credits that would be generated by the project once validated and initially verified.





These payments covered the technical costs of designing the project (satellite analyses, consultant inputs during project documentation, field visits by carbon auditors etc.), as well as providing early payments to the communities who were being included in the forest protection work for the first time, in order to ensure that trust in the project and its ability to compensate people for their efforts to protect designated forest areas was built with community leaders and individuals.

Box 20: Yaeda-Eyasi REDD project financing



How are carbon credits priced?

There is no common mechanism to set prices in the VCM, so the way in which carbon credits are priced is not fixed or transparent. This is a problem for anyone seeking to base their/others livelihood/s on the price of carbon, and should give pause to anyone considering becoming heavily invested in the sector. Based on data from 2022, the volume of VCM credits traded dropped by 51% over the year, while the average price per credit rose by 82% between 2021 and 2022. More standardised and transparent price setting methods are likely to emerge as the market gains volume²². The price of carbon credits is influenced by:




-  **Age - Newer credits are valued more highly than older credits** - buyers may trust them more because they have been generated according to more recently updated methodologies and standards.
-  **Quality - 'High quality' credits achieve higher prices.** High-quality carbon credits are those generated by projects that maximise the climate, socio-economic and ecological benefits for both people and nature. Such projects have higher costs for design, implementation, monitoring, and for building and maintaining stakeholder relationships.
-  **Certifications - Additional certifications can increase prices.** Projects that have achieved additional certifications of broader sustainability benefits demand higher prices e.g. the Climate Community and Biodiversity Standard confirms environmental and social benefits of forest carbon projects.
-  **Power - Prices are determined by power asymmetries and the ability of parties to negotiate.** Buyers, organisations or groups that dominate the VCM can determine the price. This was especially true for earlier Power - Prices are determined by power asymmetries and the ability of parties to negotiate. Buyers, organisations or groups that dominate the VCM can determine the price. This was especially true for earlier REDD + projects, where a few buyers dominated transactions.

Box 21: Carbon credits pricing





Selling carbon credits

In order to earn revenue from the carbon credits a project must have the capacity to market and sell those credits in a competitive marketplace. A conservancy will invariably need to partner with an independent organisation with the capacity to market and sell the project's carbon credits (this may well be the project proponent or a specialist expert in marketing and sales).

Key terms in selling carbon credits

-  **Issuance:** Credits are made available by the standard to be transferred. This usually requires a fee to be paid by project.
-  **Transfer:** During a purchase, the credits will be moved from the project's account to buyer's account on the registry. This is a transfer of ownership.
-  **Retirement:** Once the buyer wants to remove the credits to be used, for example, towards a specific carbon target, the credit will be retired in perpetuity, which prevents further transfer of ownership.

Bringing credits to market

-  Once credits are issued, there are several ways for the offtake: the project may have a pre-agreed offtake agreement with an investor, it may market and sell credits through bilateral or multilateral relationships to private sector buyers, or it may engage a broker or place credits on an exchange.
-  Most of these require **legal contracts**.
-  Once the purchase has been made, the project proponent requests the transfer of title on the registry from the project to the buyer.
-  A credit can continue to be transferred (re-sold) multiple times, or retired in perpetuity.

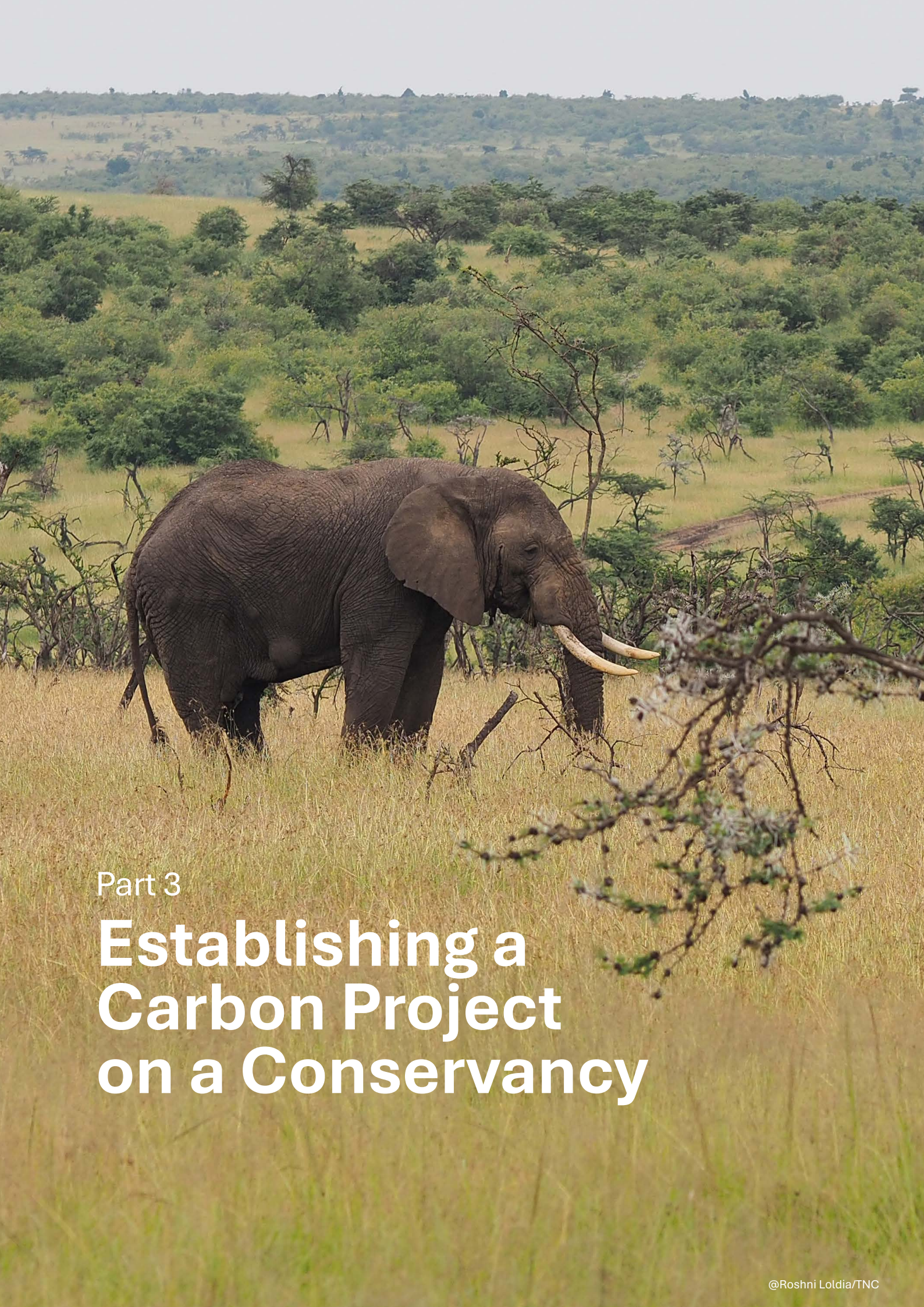
2.5.7. Benefits and risks of establishing a carbon project

The trade-offs between the benefits and risks of joining a carbon project must be considered at an early stage. The benefits of a carbon project are often the main focus of a conservancy and its members, but the risks to a community must also be considered as a project is developed.

Benefits	Risks
<p> Conservancy and household revenue: Potential long-term revenue stream to the conservancy and benefits to membership.</p> <p> Strengthened governance of natural resources: Conservancies must implement new management activities to improve natural resource management in order to generate credits. Ultimately this relies on transparent governance. Revenue and technical assistance from a diverse carbon project team will be used to improve decision-making processes and create transparent, accountable, equitable and diverse representation in communal governance.</p> <p> Job creation: In project management, fieldwork, monitoring, as conservancy rangers, and in secondary jobs created in industries such as ecotourism and the livestock sector.</p> <p> Enhanced biodiversity and ecosystem services: Healthy ecosystems within a well-managed conservancy provide numerous services such as water filtration, soil fertility, flood control and habitats for wildlife species.</p> <p> Communal investment that stakeholders see as relevant. For example, through the Chyulu Hills REDD project over 25 schools have received support through the carbon sales, 79 teachers employed, and more than 320 scholarships awarded to bright and needy students. With the NKRCF, over 31 development projects received funding and USD 555,000 was distributed in school bursaries.</p>	<p> Poor design and/or implementation: If a project is poorly designed or badly run by a developer or project proponent, or a methodology is faulty, it may fail to meet the verification criteria and may not be able to generate carbon credits and not receive any funding, impacting a conservancy's financial sustainability.</p> <p> Restrictions on community: For example, if the conservancy agreed to land use restrictions and rules associated with the carbon project that they do not understand or want or which disproportionately impact certain members of the community (e.g. women who use fuelwood etc.) This may lead to long-term resentment and decreased buy-in of the project.</p> <p> Unstable market: The carbon market is unstable and so inherently risky, carbon credit prices are subject to global market fluctuations. Over-reliance on these markets can make conservancies financially vulnerable.</p> <p> Generate insufficient revenue: So that the project cannot sustain itself nor its beneficiaries, especially if a large expectation of conservancy members has been placed on the project.</p> <p> Exacerbate social inequalities and social tension: If the financial benefits of carbon projects are not equitably shared, conservancy members might not gain the expected economic advantages. This can exacerbate social inequality and tension and lead to resentment against the project and the conservancy in general.</p> <p> Not meeting the long-term commitment: Carbon projects require long-term commitment, of at least 30 years. Changes in social needs or priorities or external pressures over time may affect the sustainability of the project.</p> <p> Reputational damage: For the conservancy from participating in a project that receives negative press coverage due to scepticism of its credibility, authenticity and standards. This includes recent concerns around the human rights processes adhered to by conservancies and carbon projects and the accuracy of calculating the number of carbon credits created by a project.</p>

Box 22: Benefit and risks of establishing a carbon project

How to mitigate these risks, and maximise these benefits to a conservancy, are addressed in [Part 3](#).



Part 3

Establishing a Carbon Project on a Conservancy

This part of the guide lays out the five crucial steps and conditions required to establish a carbon project on a conservancy.

1. Scoping
2. Concept
3. Feasibility
4. Design and development
5. Project operation

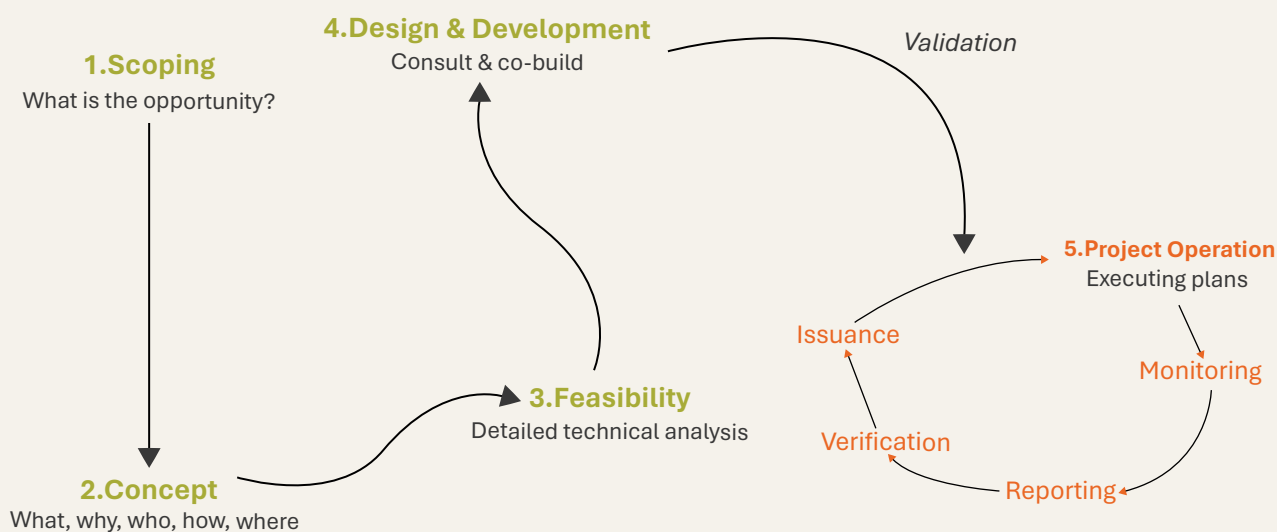


Figure 10: Steps and conditions required to establish a carbon project

These projects may originate in different ways, **with key considerations:**

- ✿ A conservancy is searching for a project developer to develop a carbon project in their conservancy. The scoping period is important for the conservancy, and must carefully consider who could develop the project, is the project a large enough scale, and will the project create significant changes to carbon stores.
- ✿ A group of conservancies, often working with their landscape associations, wish to develop a carbon project across multiple conservancies. The role and mandate of the landscape association must be well laid out in relation to the project developer, in addition, the complexities of developing a governance structure and benefit-sharing agreement between multiple conservancies and partners can become a lengthy process.
- ✿ A conservancy is approached by a project developer, who already has begun scoping a project. During project scoping the conservancy should critically understand the project developers' motivations, finance strategy, and benefit-sharing agreement.

Before we examine each of these phases there are four key principles that apply to the project development process (Figure 12).

Philosophies for project design and development



Iterative and adaptive

The project is constantly and iteratively refined and adapts to changing circumstances.



Documented

Each phase of the project is thoroughly documented to build evidence for project audits. These docs are openly available.



Collaborative

This project is co-designed in consultation with stakeholders, including direct rightsholders and those indirectly impacted.



Process-focused

Many carbon standard requirements are around process, rather than specific project features.

Figure 11: Four key principles that apply to the project development process.



@KWCA

Carbon Credit Project Development

Example: REDD costs are estimates and approximations from available data

Scoping	Concept	Feasibility	Project Development	Operation
<p>Cost: \$50,000 for technical consultants.</p> <p>Objective: Assess the feasibility and readiness of the conservancy to undertake a carbon project by evaluating environmental characteristics, land use trends, financial viability, and legal conditions.</p> <p>Timescale: 1 month</p> <p>Activities: Internal discussions, data review, stakeholder mapping, and risk assessments.</p> <p>Deliverables: A comprehensive assessment report on project readiness.</p>	<p>Cost: \$25,000 for stakeholder consultation and technical expertise.</p> <p>Concept application fee payable to Designated National Authority (DNA) to obtain letter of no objection at Kshs 10,000 covert to USD if proponent is a Kenya national or Kshs 100,000/= if proponent is non-national</p> <p>Objective: Define the project's conceptual framework, identifying stakeholders, roles, project activities, and Areas</p> <p>Timescale: 8 months</p> <p>Activities: Stakeholder consultations, development of a governance structure, and creation of a project idea note</p> <p>Deliverables: Project idea note including stakeholder information, governance structure, and a theory of change.</p>	<p>Cost: Initial consultations \$100,000; Field studies \$150,000; Additional costs for technical consultants are \$150,000</p> <p>Objective: Develop a detailed report covering all critical aspects of the project</p> <p>Timescale: at least 9 months</p> <p>Activities: Selection of carbon standard and methodology, data collation, extensive stakeholder consultations, and detailed risk analysis.</p> <p>Deliverables: A detailed feasibility report outlining the project area, carbon stock assessment, legal and policy alignment, and financial analysis.</p>	<p>Costs: Field studies \$200,000; Stakeholder consultations \$40,000; Technical consultants \$120,000; Validation and Verification Body (VVB) fees \$70,000; Certification registration \$10,000</p> <p>Project validation fee payable to DNA of Kshs 100,000/= if proponent is a Kenya national or Kshs 200,000/= if proponent is non-national</p> <p>Objective: Formalise the project design</p> <p>Timescale: at least 9 months</p> <p>Activities: Drafting the Project Design Document (PDD), conducting field studies for baseline data, establishing contracts and governance frameworks, and undergoing validation audits</p> <p>Deliverables: A validated PDD and contractual agreements</p>	<p>Cost: Highly variable; however, technical monitoring and verification can typically cost around \$60,000 for consultants, \$10,000 for fieldwork, and \$50,000 for VVB fees</p> <p>administrative fee of \$0.10 per carbon credit issued for the first 15,000 tonnes of CO₂ equivalent to the actual issuance in an year; and U\$0.20 per carbon credit issued for excess of 15,000 tonnes of CO₂</p> <p>Objective: Implement, monitor, and adapt the project activities based on the validated project design and stakeholder feedback, aiming for sustainable and verifiable emission reductions</p> <p>Timescale: 30 years, with review cycles every 1-5 years</p> <p>Activities: Implementation of management plans, ongoing monitoring and reporting, stakeholder engagement, revenue sharing, and marketing of carbon credits</p> <p>Deliverables: Regular monitoring reports, verified emission reductions, and revenue distributions</p>

Figure 12: Carbon Credit Project Development

3.1. Social engagement and safeguards

Before we outline the steps we first focus on social engagement and safeguards. This is because social engagement is the bedrock of any carbon principles. **It is crucial that stakeholders have a right to say no at any stage.** For conservancies, especially community or group conservancies, this process should include **Free Prior Informed Consent (FPIC)** principles:

- ✿ It is **a specific right** that originates from the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).
- ✿ It allows communities to give or withhold consent to a project that may affect them or their territories. Once they have given their consent, **they can withdraw it at any stage.** Furthermore, FPIC enables them to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated²⁰.
- ✿ **FPIC will be unique to each project's circumstances.** Engaging in culturally appropriate behaviour and respect are key aspects of FPIC.

Free Prior Informed Consent (FPIC)	
It can only result from thorough social consultation.	
Please see KWCA's guide on FPIC ²¹ . FPIC is an ongoing mechanism and a process whereby indigenous communities undertake their own independent collective decisions on the matters that affect them.	
Free?	No external interference and pressure on communities from any other groups, bodies, and entities in the decision-making process. It is freedom from any manipulation, bribery, or intimidation.
Prior?	The green light should be given by communities in advance, before the commencement of any activities, projects or investments that affect their rights. The communities should be given time to understand and analyse the proposed project or investment and, secondly, to make decisions after analysing the effects and impacts of the proposed project or investment.
Informed?	Communities likely to be affected by activities have a right of access to information, full disclosure and understanding of the potential project's investment impacts. This includes the freedom of participating communities to secure additional information from other sources, besides those proposing a project, and an equal right to change and/or review their decision based on emerging facts.
Consent?	This is a collective decision-making process of indigenous peoples that involves several steps that should be consultative, transparent, inclusive and well-informed. There should also be meaningful and accountable participation of the community representatives in the decision-making process.

Box 23: FPIC unpacked

²¹ The Taskforce for Scaling Voluntary Carbon Markets is also established to increase the efficiency and transparency of the carbon market and the advent of carbon credit trading platforms; e.g. CBL, Climate X, is likely to create greater price discovery and transparency into the market.

3.2. Phase One: Scoping

Overview	Deliverables	Time scale	Estimated Budget
Before a conservancy can commit to actually implementing a carbon project, a series of questions need to be asked to understand the basic pre-conditions for whether such a project exists or can be created. These questions relate to both the conservancy and the project as a whole.	A comprehensive assesment report on project readiness	A month	Technical consultants: carbon \$50,000 ²²

Questions for readiness:





- ✿ **What are the environmental characteristics of your conservancy?** What data and information exist on these characteristics?
- ✿ **What are the key land use trends?** In terms of carbon being stored or released into the atmosphere, and what potential is there for increasing or reducing that? E.g. rates of deforestation and forest biomass stocks to understand baseline emissions rates from unplanned deforestation, or looking at the incidence of bare ground as a proxy for rangeland degradation and the potential for restoration.
- ✿ **Can the project demonstrate additionality?** A carbon project is ‘additional’ if the project results in emissions reductions or removals above what would have occurred without the project existing. For grasslands, how can the project ensure that for example, through carbon revenues, livestock owners will have an incentive to modify grazing regimes to promote the recovery of grasslands and enhance carbon sequestration?
- ✿ **Is the project financially viable?** This can be very coarse and includes an understanding of the cost of implementing the activities, set against the potential credit yield expected when the project activities are verified. See Box 21 in Part 2 to understand how carbon credits are priced.
- ✿ **Can the land use impact be addressed solely through carbon revenue?**
- ✿ **Are the conservancy’s land ownership and use rights clear and secure?** Is there legally recognised documentation for these rights? For community conservancies, this means that the community has obtained a certificate of title, following the registration of community land rights under the provisions of Community Land Act 2016. For group conservancies, this requires consent through the lease process.
- ✿ **Are there any legal limitations that affect the conservancy?**
- ✿ **Does the conservancy** (or organisations it can partner with e.g. NGOs, CBOs, CSOs, regional associations) **have the capacity to develop and implement a carbon project for at least 30 years?**
- ✿ **Can the project ensure that governance structures would be robust enough to develop, implement and manage a carbon project?** If not, how can this be addressed?
- ✿ **Does the project bring any risks or might it be undermined by any risks?** Are there any known social risks (e.g. land use conflicts, boundary conflicts, resource use conflicts from external parties) or natural risks (e.g. flood, fire, drought that might undermine the project) If so, how can these be resolved?

²² Estimated costs listed through consultation with The Nature Conservancy and Carbon Tanzania, but project costs will vary significantly on project context and design. Note that throughout all project phases, significant dedicated staff time is also required and not considered.





3.3. Phase Two: Concept

Overview	Deliverables	Time scale	Estimated Budget
This phase is largely based on the internal experience of the conservancy and any local partners they may have (NGOs, regional associations) and their understanding of the landscape. It involves developing a concept for how the project would work in terms of what, who, where, how?	<p>A project idea note (Annex 2) that includes</p> <ul style="list-style-type: none"> Stakeholder identification and mapping. Social risk assessment. Governance structure. Mitigation plan. Theory of change. 	3 months	<p>Technical consultants: carbon \$25,000</p> <p>Application fee of Kshs 10,000/= (National proponent) or Kshs (Non-Kshs 100,000/= (Non-national proponent)</p>

Key activities:

-  Initial internal discussions and with any key partners.
-  Review of available data and information.
-  Drawing on large-scale spatial data sets to develop some initial estimates of baseline carbon emissions or removal potentials.
-  Application of concept with NDA to obtain letter of No Objection in order for the project to progress.

Key questions:

-  **What** is the project's theory of change (TOC)? This is to say, how are the project conservation activities expected to lead to specific change in terms of climate mitigation ([Box 22](#))?
-  **Who** are all of the project stakeholders? Who will be involved in developing and implementing the project; who will be directly and indirectly impacted by the project activities both positively and negatively. What are their roles, responsibilities, risks, and interactions in the project ([Box 4](#)) ?
-  **How** will the project be delivered in terms of key activities?
-  **Where** will the project intervention take place? Precise spatial information on the extent of the project area ([Box 22](#)) for defining the scale of the project), and where potential leakage belts, or reference regions might be.

What is a Theory of Change (TOC)?

A TOC is a hypothesis about how a desired change in land management practices will happen. It is essentially a roadmap that describes the processes that will be implemented by a project to shift the status quo of a landscape towards a desired outcome (reduction of CO₂ emission or an increase in CO₂ sequestration). It takes into account the problems, identifies the strategic approaches to address these, anticipates outcomes and outputs and the desired end goal. It also describes the underlying assumptions and risks.

A TOC provides pathways on how the core challenge can be tackled. In the case of carbon projects, this addresses the drivers and agents of deforestation and/or barriers to restoration or sustainable forest management. You need to understand who are the main dynamics that cause emissions or prevent restoration, and thus must be included. Knowledge of the local context, as well as talking to stakeholders and actors (i.e. those responsible for deforestation) is required to understand and develop solutions.

Box 24: Theory of Change

Defining project scale

There is no size in area or tCO₂e per year that a project needs to be; however size is largely determined by the economics of a project. **The minimum viable size for a project is one in which the costs of project development, interventions and operations are covered by the revenue from carbon credit sales.**

Many of the costs associated with carbon projects, particularly carbon certification, are fixed and fairly independent of area, i.e. the VERRA fee for registering a carbon project is set at US \$10,000 independent of project size. Therefore the minimum viable project is often determined by the credit yield in tCO₂e per year which a project can generate. A rule of thumb is that a project generating less than 100,000 tCO₂e per year needs careful financial analysis. However, a project of this size of credit yield can be significantly different in terms of land area. High carbon stock forests with a moderate risk of deforestation (e.g. more than 400 tCO₂e forest biomass with 2% annual forest loss) can generate more than 8 tCO₂e per hectare per year, compared to a rangeland restoration project where soil accumulations may be less than 1 tonne of CO₂ emitted per hectare per year. Using these approximations then, the minimum project area for a REDD project would be 12,500 hectares, while the minimum size for an improved rangeland project could be 200,000 hectares.

The financing and technical requirements of a project means projects are in the thousands of hectares, and do not operate at the individual conservancy level. However, projects can be designed to aggregate lots of smaller land parcels into one project. These aggregators may be regional conservancy associations or conservancy bodies that bring together multiple areas. The process of aggregation increases the complexity of stakeholder engagement and legal matters - and therefore raises the cost per ha - since many more voices must be incorporated, and the legal rights of each entity must be considered in all contractual matters.

To make a precise assessment of minimum project size and the financial viability of a carbon project you need to estimate the following: carbon credit yield, price of carbon credits, cost of carbon certification and cost of project implementation.

Box 25: Defining project scale

Key activities:

Stakeholder consultations through focus group discussions and key informant interviews to:

- Ensure all stakeholders have been identified and included.
- Understand how land ownership and management decisions are made.
- Identify existing and potential threats in the landscape (and the project) and solutions.
- Plan and design project interventions among stakeholders that will directly participate in a project.
- Introduce the project idea to the county government.
- Plan and design a governance system to deliver project interventions.

Develop a project team:

Successful project implementation requires a well-rounded set of science/technical, operational and commercial capabilities through a strong management team and/or strategic partnerships. It is highly unlikely that one conservancy would be able to implement a carbon project entirely on its own. Local, internal knowledge of the conservancy/conservancies is required for the early stages of project development. Technical support is increasingly required as the project further develops. This includes:

- Landscape expertise - from landscape associations and the KWCA to scale projects beyond a conservancy.
- Legal expertise - to protect rights of conservancies and people affected by the project; to develop contracts; to ensure the project complies with Kenya's evolving regulations.

- Financial expertise - for evaluating project viability, budgeting financial modelling, management of fundraising process, engagement and negotiations with investors and buyers.
- Carbon expertise - for project design, choosing standards and methods, navigating risk of opportunistic project developers and monitoring and evaluation expertise.
- Social engagement expertise, documentation, engagement with communities, the securing of their buy-in, and the development of sustainable governance structures, design of benefit-sharing arrangements.



3.4. Phase Three: Feasibility

Overview	Deliverables	Time scale	Estimated Budget
<p>This phase requires increasing amounts of support from external experts. A project needs to develop a detailed report covering all project components including:</p> <ul style="list-style-type: none"> Project background and context. Identification of carbon standard and methodology. Climate impact analysis based on initial field data. Alignment with a clear legal and policy framework. Development of a full stakeholder consultation plan. A detailed implementation and business plan. Governance structure and financial model. 	<p>Feasibility report (Box 26)</p>	<p>At least 9 months</p>	<p>Initial consultations \$100,000K</p> <p>Field studies \$150,000K</p> <p>Technical consultants: carbon \$150,000</p>

Feasibility report that includes:			
<input type="checkbox"/> Project area	<input type="checkbox"/> Implementation team and capacity of implementation	<input type="checkbox"/> Project start date and crediting period	<input type="checkbox"/> Long-term financial mechanism
<input type="checkbox"/> Additionality, leakage, permanence	<input type="checkbox"/> Land Tenure and policy context	<input type="checkbox"/> Validation and verification schedule	<input type="checkbox"/> Risk Analysis
<input type="checkbox"/> Project information	<input type="checkbox"/> Property ownership/land tenure and carbon rights	<input type="checkbox"/> Baseline scenario	<input type="checkbox"/> Risks and challenges to the project
<input type="checkbox"/> General characterisation	<input type="checkbox"/> National and local carbon legislation	<input type="checkbox"/> Carbon accounting	<input type="checkbox"/> Next steps and timeline for project development
<input type="checkbox"/> Physical parameters	<input type="checkbox"/> International carbon market considerations; NDCs, Article 6 etc.	<input type="checkbox"/> Financial analysis	<input type="checkbox"/> Potential for scaling the project activities
<input type="checkbox"/> Historical land use	<input type="checkbox"/> Legal agreements and government support	<input type="checkbox"/> Start-up investment required and project costs	<input type="checkbox"/> Risk registry
<input type="checkbox"/> Biodiversity	<input type="checkbox"/> GHG benefit or carbon accounting	<input type="checkbox"/> Project carbon revenues and non-carbon revenues and funds	<input type="checkbox"/> Consultation plan
<input type="checkbox"/> Drivers of GHG emissions or restoration barriers	<input type="checkbox"/> Carbon standard and methodology applicability	<input type="checkbox"/> Project financial return model	<input type="checkbox"/> Consent to proceed for rights holders
<input type="checkbox"/> Stakeholders and social safeguards		<input type="checkbox"/> Minimal carbon price and sensitivity analysis	
<input type="checkbox"/> Stakeholder identification			
<input type="checkbox"/> Stakeholder engagement and communication plans			

Box 26: Checklist for feasibility report

Key questions:

- 🌳 What carbon stocks will be accounted for in the project, and what is the anticipated impact on carbon stocks from project activities?
- 🌳 Which carbon standard should the project use?
- 🌳 Which methodology should the project use?
- 🌳 What is the revenue and associated costs of the project?
- 🌳 What is the project's cash flow and investment need?
- 🌳 What are the key risks to the project development and long-term operation, and how can these be mitigated and managed?

Key activities:

» Select standard:

The choice of standard will be guided by:

The scale of project: For example, Plan Vivo's standard lends itself to individual projects on reasonably small areas of land. On the other hand VERRA's methodologies are designed for large scale landscape projects, and for projects that may in the future want to add additional areas for carbon accounting and crediting, which is known as creating a "grouped project".

What the proposed project activities are: If preventing deforestation is the aim of the project, a methodology that accounts for emissions reductions generated from actions to achieve this goal is needed. VERRA and Plan Vivo offer methodologies for accounting for REDD activities.

The potential credit price and appeal to market: The different standards offer different qualities for the eventual buyers of the carbon credits in the VCM. Carbon credit projects and their associated methodologies have attracted criticism over recent years, and VERRA's methodologies have been singled out for specific scrutiny. This inevitably impacts on the perceived value of the carbon credits that are verified by the standard and therefore may lead to lower prices being offered for credits verified by VERRA. Equally, Plan Vivo has a reputation for verifying high quality projects that focus on community benefits and favour an overall equitable approach, and this means their credits attract higher prices in the market. However there are many fewer buyers for Plan Vivo credits than for credits certified by other standards, so it is more challenging to secure buyers.

The costs of Validation and Verification: The choice of standard may also be affected by the financial capacity of the conservancy. VERRA methodologies are more costly to validate and verify, while Plan Vivo projects tend to have lower costs for project validations and verifications.

The partners: Where a conservancy has specific strategic partners who have experience in the development of marketing for carbon projects, the choice of standard may be influenced by this relationship.

Box 27: How to select a standard?

» Select methodology:


The choice of methodology will be guided by:

The plan of activities informs the choice of methodology. Both VERRA and Plan Vivo offer methodologies for accounting for REDD activities, while only VERRA offers methodologies that account for the increased health of rangelands measured in the enhanced volumes of soil carbon.


Both VERRA and Plan Vivo offer ways to value the socio-economic co-benefits of the project activities, which add to the value of the carbon credits that the project will eventually generate. Plan Vivo includes the reporting of these co-benefits in its core accounting framework, while VERRA offers an associated standard certification called the Climate, Community and Biodiversity Standard (CCB²³). This allows projects to demonstrate that the project and its activities result in positive results for the affected communities and the associated biodiversity in the project area.

Box 28: How to select a methodology?

²³ [Climate, Community and Biodiversity Standard \(CCB\)](#)

 **Collate project data:** The choice of certification standard and specific methodology leads the conservancy to the stage of collating basic data and information about the proposed project area.

- **Project area:** The project area will need to be clearly defined and described, including its boundaries, its physical characteristics, and its cultural and socio-economic context and significance.
- **Land-use tenure and status:** The community land-use tenure and associated management rights must be clearly described, and evidenced with land documents e.g. certificates, titles or other legal instruments relevant to the project area.
- **Strategic/commercial partner identification:** The conservancy may have existing or potential strategic partners who are engaged in the landscape. These need to be described, and the roles and responsibilities of these actors clearly understood and recorded.
- **Additionality argument:** Following the preliminary assessment of the potential additionality that the project and its associated activities intend to offer, a detailed description of this needs to be developed, including data about comparative baseline situations where activities are leading to emissions sources, such as deforestation.
- **Consideration of leakage:** Understanding the potential for leakage and creating plans to minimise it is a key part of project design.
- **Assessment of permanence:** Permanence can be assessed by experts in the field of carbon project development.
- **Risk analysis:** This involves identification of factors that might negatively impact stakeholders or the environment and that might prevent the project being successfully implemented over the required time period.

 **Stakeholder consultation with project data:** All the people and groups, their members and leaders, who will either be directly responsible for project implementation, or will be involved in project activities, or will be affected or impacted (positively or negatively) by the implementation of the project must be consulted. Meetings should be held which include all stakeholders and during which the project's aims and objectives, proposed activities, governance structures and general features should be explained such that people have the opportunity to ask questions, critique information, raise objections or suggest alternatives. Robust international certification of carbon projects should in principle be impossible without a thorough FPIC process being followed, so this often calls for the involvement of external, neutral and respected rights-based partners who can both facilitate the sessions and verify that best practice guidelines have indeed been followed. Based on the above, an **engagement plan** must be created for effectively engaging actors in all phases of the project, including project monitoring. These activities take time, specialised expertise, and money – conservancies must budget and plan for these resources appropriately. **It's important to note that the process is always more important than the final products – the focus must be on building authentic relationships, deep understanding, and a truly co-designed project rather than on checking off standard requirements.**

This process should build a common understanding of the project's goals, science and mechanism. This is the interaction between climate change, human behaviour change (e.g. reduced deforestation or grazing management), carbon markets, and the carbon project development process. This phase should finish with the consent of communities agreeing to explore carbon development further, if they wish.

🌿 **Conservancy feedback:** Solicit feedback and input for key conservancy stakeholders, particularly those directly impacted by the project. This is also critical to ensure FPIC (see below). Key elements include:

- a. Consultation progress and representation at different stages across the project development process
- b. Design and delivery of interventions and governance structure
- c. Rights and representation; including land ownership, management and carbon rights
- d. Benefit sharing mechanisms
- e. Grievance mechanisms and ongoing project communication

🌿 **Legal review** of the environment including land rights, management rights, climate policy and regulations, environmental regulations.

🌿 **Financial planning** for interventions and operations, and modelling this against projected revenue from carbon and other revenue streams.



@KWCA

3.5. Phase Four: Project development

Overview	Deliverables	Time scale	Estimated Budget
<p>A comprehensive project design process lays the foundations for the practical steps involved in the development of the project so that it can be validated. The initial project activities will then subsequently be verified so that carbon credits can be issued to the project. Documentation is key to this process. All projects in the VCM require the drafting of a Project Design Document (PDD).</p> <p>Drafting the PDD requires the completion of stakeholder consultation processes; the closure of agreements; undertaking baseline surveys; the final analysis of climate impact; and the establishment of project management systems. Once a PDD is drafted it needs to undergo a validation audited by a third party VVB before registration with a carbon standard and becoming certified, although no carbon credits are generated at this point.</p>	PDD template specific to the chosen carbon standard.	at least 9 months	<p>Field studies \$200,000</p> <p>Stakeholder Consultations \$40,000</p> <p>Technical consultants \$120,000</p> <p>VVB fees \$70,000</p> <p>Certification Registration \$10,000</p> <p>Government approval fee (Kshs Kshs 100,000/= for national proponent and Kshs 200,000/= for non-national proponent</p>

Key questions:

- 🌳 Do rights holders consent through FPIC to participate in the project and transfer the right to represent carbon offsets in the market to the project proponent?
- 🌳 What are the agreed upon roles, responsibilities of all parties in the operation of the project?
- 🌳 What are the agreed upon mechanisms for benefit sharing, grievance redress and conflict resolution?
- 🌳 What are the baseline conditions that impact will be measured against?
- 🌳 Are the activities additional, do they mitigate leakage and have a realistic plan for ensuring permanence of impacts?
- 🌳 Does the project meet carbon standard requirements and processes?
- 🌳 How will impacts be monitored and reported?
- 🌳 Has letter of support been obtained from relevant County government?
- 🌳 Has the community development agreement sufficiently negotiated and agreed between community and proponent?

Key activities:

- 🌳 **Mapping:** Analysing the project habitat, which may require external expertise e.g. through satellite remote sensing using historical images to assess change and physical visits to ground truth the current situation. Forest areas can be mapped increasingly accurately and technology is improving to assess soil carbon content in rangelands. Specific approaches may be required by different methodologies and standards.

✿ **Estimating carbon value:** While earth observation technology allows for increasingly accurate measurements of habitats from satellites, it is still necessary for the project to make physical estimates of the carbon values in the landscape. Depending on the methodology being used, field work will need to be planned to collect samples (e.g. soil samples in the case of grazing management) or make measurements on forest plots (in the case of REDD type projects). The project proponent must make a detailed plan for this field work, including the expected timeframe, what logistics will be needed, and the costs involved. Baseline estimates of carbon values are created during this fieldwork using standardised algorithms.

✿ **Contract agreement and signing with stakeholders:** This includes field work to collect baseline data on social context, including household level surveys and interviews. This in depth consultation with stakeholders includes the co-design of crucial project features: governance structure, intervention delivery, grievance and conflict resolution, benefit and revenue-sharing mechanisms.

Designing a fair, inclusive, transparent and equitable benefit-sharing mechanism, is key to the success of a carbon project. [Figure 13](#) lays out key steps required to design a benefit-sharing mechanism.

On the basis of FPIC from these consultations, the project develops a legal contract that describes the roles and responsibilities of the respective parties in the landscape (including between the conservancy and project proponent if one has been engaged). Legal expertise will be needed to ensure that there are no legal barriers to contracting between the participating parties, and to ensure that all rights (land tenure, access, cultural etc.) are observed. Consideration will be given to whether the contract requires third party oversight or the involvement of different levels of government jurisdictions in order for it to be legally enforceable.

This process is designed to ensure the main actors in the carbon project voluntarily consent to the terms of the project and their role within it. It also ensures they fully understand the terms of the agreement they are signing, which includes the benefit sharing mechanism and may include the transfer of rights to a proponent other than the landowners to represent carbon credits in the market.

✿ **Develop and sign a final benefit-sharing agreement and investment agreement between the project proponent and conservancy** ([Box 29](#)).

✿ **Other social safeguards developed:**

There are additional safeguards that a project needs to take into account, follow and implement, including.

- » **Grievance-redress mechanism:** the project should co-create with stakeholders an accessible Grievance Redress Mechanism. Steps for addressing grievances must be agreed with the stakeholders and often follow traditional processes.
- » **Gender-responsive approach:** This aims to promote the inclusion of women and other vulnerable groups in decision-making and achieve equality and empowerment. It also seeks to address the risks of sexual and gender-based violence, exploitation, discrimination, and abuse.

- » **Access restriction:** Restriction of access to a resource or land may result from a carbon project implementation. Access restriction can be linked to a change in behaviour and land management; these are generally necessary restrictions, such as bunched grazing, which is a restriction on how to graze your cows. These must be co-designed and agreed upon by ALL stakeholders.
- » **Non-discrimination:** Any and all engagement with stakeholders must be non-discriminatory, including against gender, age, status, sexual orientation, religion and other aspects.
- 🌿 **Developing Monitoring, Reporting and Verification (MRV) protocols:** All carbon projects require that the project proponent develops a comprehensive MRV system of the project's impacts on climate, community and biodiversity that will meet the demands of the chosen Standard and Methodology. Most MRV systems are a combination of physical data collection by teams on the ground in the project area with remote sensing analysis. Forest protection projects usually demand forest scouts or rangers to be on the ground patrolling the area, recording illegal activities, preventing and reporting them where possible. Rangeland management projects may rely more on technological monitoring of their soil carbon, but regular records of grazing rotation regimes, challenges faced by community pastoralists and incidence of overgrazing etc. need to be reported to the management of the project. On-going monitoring allows project managers to take corrective actions if needed. Social impact will likely be monitored through questionnaire surveys and interviews. This will include establishing a project monitoring database.
- 🌿 **Developing a fundraising plan:** Beginning to look at raising investment and forward sales of credits.
- 🌿 **Auditing:** Contracting a third party auditor certified as a Validation and Verification Body (VVB) to undertake a validation audit. The audit may include reviewing all project documentation; cross checking this against other sources; interviewing stakeholders and others; reviewing specifics about the methodology, etc. Once validation is complete then the project pays a fee to the carbon standard to be certified and the project features on the carbon standard registry. No carbon credits are generated at this point.



@John Kasaine/AET

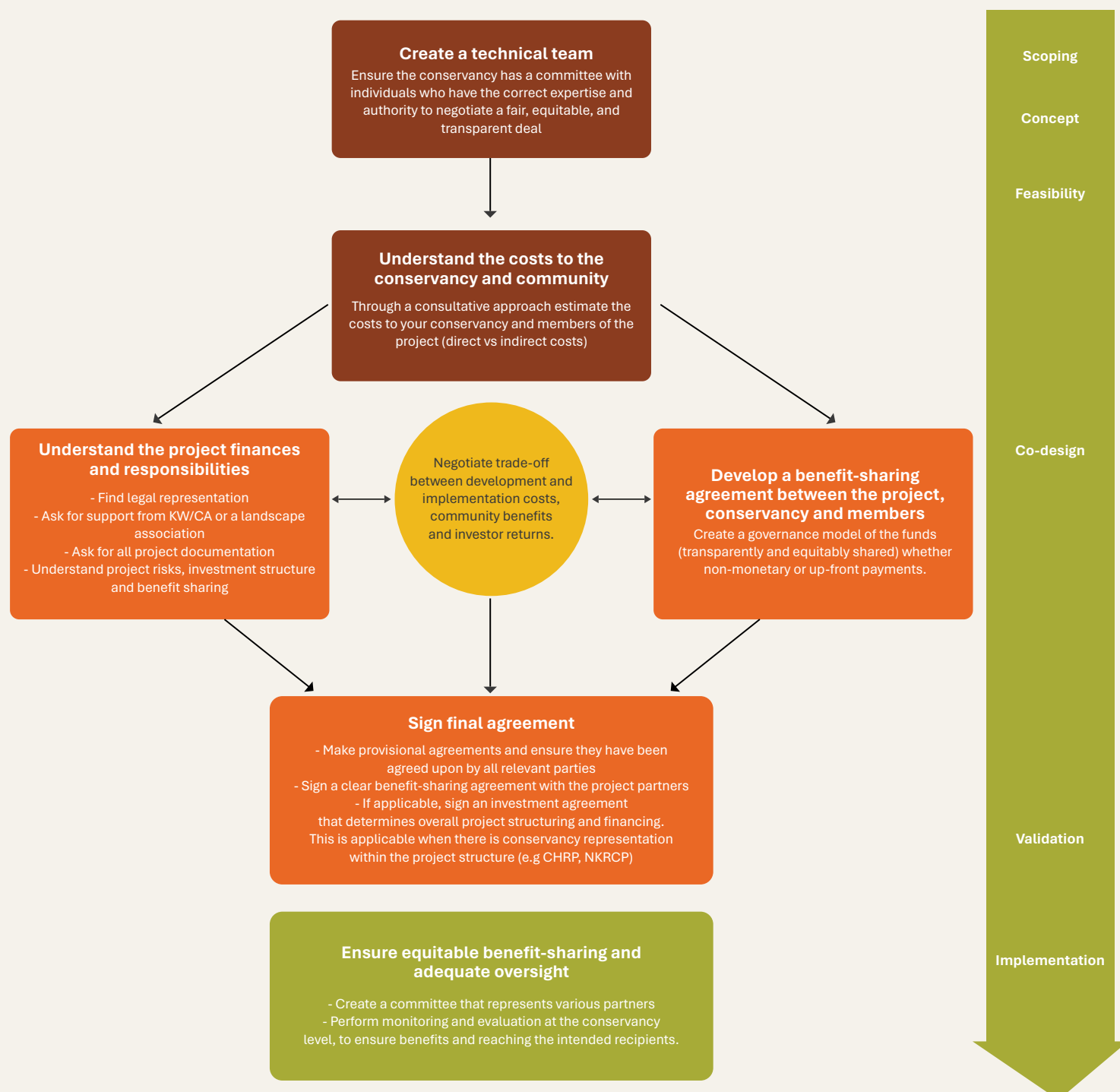


Figure 13: How to design a benefit-sharing mechanism

Community Development Agreements

Benefit sharing for carbon projects occurring on community land is regulated under the Climate Change (Amendment) Act 2023. The Act requires that the project proponent disburses to the community at least 40% of the aggregate earnings of the previous year, less cost of doing business. The community enters into a community development agreement (CDA) with the project proponent, through which the benefits disbursed to community are administered and implemented. The CDA sets out the agreement between the project proponent and community on community development initiatives. The scope of a CDA is provided under schedule 4 of the Carbon Market Regulations.

Where a conservancy is constituted by amalgamating more than one community land, then the CDA is signed by each community with the project proponent. The management and disbursement of benefits shall be undertaken by a community project development committee whose structure, roles and responsibilities are set out in the CDA. The community project development committee is constituted of representatives of the community, the project proponent representative, County government representative appointed by the Governor and National government representative in charge of administration in the county.

The CDA remains in force between the project proponent and community for the life of the carbon project and can only be modified with the prior written consent of both parties, at least every five years.

The National and the County government where the project is developed have the responsibilities to oversee and monitor negotiations of CDA between project proponent and the community, and further enforce community rights negotiated under the CDA. The signed CDA is required to be included in project design document that is submitted to the Designated National Authority and recorded with the National Carbon Registry.

Box 29: Community Development Agreements

3.6. Phase Five: Operation

Overview	Deliverables	Time scale	Estimated Budget
The previous phases result in a clear plan, set out in the PDD, for the management of the conservancy's resource in question in a methodological way that allows for the project's activities to be monitored and assessed by third parties so that their success in reducing or avoiding emissions can be quantified. Next, the project proponent needs to put these plans into place practically and adaptively, based on stakeholder consultation.	<p>Ongoing monitoring reports to be verified by a validation and verification body.</p> <p>Verified emission reductions and credits to buyers.</p> <p>Revenue to stakeholders.</p>	30 years; in cycles of 1-5 years	<p>CAPEX and OPEX Too variable to assess</p> <p>MRV Too variable to assess</p> <p>Technical consultants monitoring report drafting \$60,000</p> <p>Fieldwork \$10,000</p> <p>VVB fees \$50,000</p> <p>Issuance fees \$0.025-0.14 per tCO₂e</p> <p>Government administrative fee of \$0.10 per carbon credit issued for the first 15,000 tonnes of CO₂ equivalent to the actual issuance in an year; and \$0.20 per carbon credit issued for excess of 15,000 tonnes of CO₂</p>

Key questions:

- 🌱 Are the interventions working and being sustained?
- 🌱 Are there ways to improve project design and monitoring?
- 🌱 Are revenues generated and shared sufficient to be sustainable?
- 🌱 Are all stakeholders fully informed about the project?
- 🌱 Are stakeholder concerns, feedback or grievances being addressed and included in the project?

Key activities:

🌱 **Validation:** The project plans and activities first need to be validated by a third-party carbon auditor certified as a VVB to confirm that they have a reasonable probability of leading to the expected emission reductions. Validation can take place any time from the beginning of project activities, and is usually done in the first year of the project. The project management will need to select which third party auditor to engage for the purposes of validating the project and subsequently verifying its activities. Good project developers have experience with these bodies and can advise on which consulting body is most applicable to the project context. During validation the auditors will need to access all project documentation, will speak to all stakeholders, community members, leadership, individuals and government officials where relevant, to gain a full picture of how the project is being implemented. The project proponent is expected to facilitate these processes transparently so that there is confidence built in the project and its governance.

🌱 **Verification:** This usually occurs between two to five years. It is also conducted by a third party international carbon auditor (certified as a VVB). The auditors need access to all documentation, all monitoring reports, as well as access to relevant stakeholders, and field sites. The auditors compile a report which is submitted to the chosen standard agency for approval. Once approved, the number of emission reductions achieved by the project in the relevant monitoring period can be issued as carbon credits to the project proponent.

🌱 **Implementation of project activities:** For example implementing a rotational grazing programme.

🌱 **Monitoring and reporting:** There will be an on-going process of project monitoring and reporting throughout the project timeline. Report is usually submitted following the relevant carbon standard template that includes all project monitoring data and analysis of project impacts as set out in the PDD.

🌱 **Social engagement:** Throughout the project there will be thorough, ongoing consultation with stakeholders to ensure their needs are being met and addressing where they are not. Stakeholders will co-create appropriate grievance mechanisms to address situations when needs are not met.

🌱 **Revenue sharing:** Financial tracking and rigorous reporting of spending with associated paper trails and evidence is critical to ensuring that the project achieves regular verification. Investment into these financial reporting systems and associated human capacity is often the difference between a successful carbon project and one that fails to become established.

🌱 **Marketing and selling of carbon credits:** Credits need to be sold to buyers to generate cash returns to projects. Buyers may be intermediaries and/or end users, using the credits to offset their emissions.

🌱 **Adaptive management:** project activities are adapted to the monitored social and ecological situation.

Part 4

Lessons Learned From Case Study Carbon Projects in Kenya



We have already flagged many of the challenges you will face should you choose to embark on the journey of a carbon credits project. We would reinforce that this guide alone is not enough to equip you sufficiently. You should do your own research and enlist the support of impartial, third-party experts who can give you objective advice, before you start securing funds and entering into agreements. In Kenya, there have already been a number of good and bad stories from the sector. In what follows, we extract some of the key lessons which those case studies demonstrate:

- ✿ **Land tenure:** Securing land tenure is crucial because it comes with longevity. Land tenure needs to be secure for the duration of the project and even after due to additionality. Carbon projects require commitment to land use for at least 30 years.
- ✿ **Community involvement is crucial:** It ensures the development of a sense of ownership among members over whatever is happening in their locality concerning the project. For instance, the Chyulu Hills REDD Project has embedded community representatives into its governance structure and this has been critical for engaging the communities and undertaking a full FPIC process. It has also allowed the community representatives to be a critical part of the benefit-sharing discussions and funding allocations. This has facilitated the project to engage in a continuous process of information-sharing that links benefits to environmental protection and sustainability. The project has delivered very meaningful funding to community projects and programs, thanks in no small part to its robust community engagement systems.
- ✿ **Success through empathic social engagement:** Having an empathic social engagement system that understands local people's needs and allows them to make decisions that are relevant to their context. Building understanding on the ground is crucial. "Carbon" is a concept that can be hard to explain and for people to connect with. Many of Kenya's indigenous communities in fact have no traditional word for it. Communicating this information and other aspects of carbon projects is critical and ideally is achieved by working through local cultures, contexts, and languages.
- ✿ **Building true social engagement:** Building long-term social engagement that goes beyond ongoing FPIC in surrounding communities is crucial, through providing employment, alternative livelihood options, and continuous engagement.
- ✿ **Respect of human rights is central:** The temporal suspension of NKRCP and Kasigau REDD+ projects over human rights abuse claims draw the following lessons:
 - a. Extensive and regular engagement and consultation with communities impacted by project, project implementation stakeholders including hired staff is crucial to establish and address and concerns or grievances in the project
 - b. Regular review of policies and procedures that impact on the project including- grievance redress , anti-harassment/abuse, benefit sharing and management
 - c. Regular review and address of land use practices within the project area that may interrupt project or cause conflict within community
 - d. Respect community rights including culture such as traditional grazing practices and

²⁵ Carried out by former chair of the UN Permanent Forum on Indigenous Issues and current member of the African Commission Working Group on Indigenous Populations

²⁶ Due Diligence: Our Response to Oakland Institute's 'Stealth Game' Report on NRT

integrating them within project activities

- e. Regular engagement and inclusion of community views and recommendations in the implementation of project
- f. Application of FPIC in key decision making processes of project conceptualization, design and implementation and comprehensive documentation of FPIC processes including what consent was obtained and how it was obtained.

✿ **The vital role of FPIC:** Communities are critical partners in a carbon project and should be thoroughly engaged in the process. Communities must give their FPIC before projects move forward. FPIC is an expensive and time-consuming process that must be budgeted for. A key part of the FPIC process is managing expectations (in terms of finances and how much land is needed) and ensuring everyone has the same goals in mind.

✿ **Benefit sharing:** The project must have tangible benefits to those on the ground. It is imperative to ensure a participatory approach to benefit sharing which increases the acceptance of land owners and community members alike, allowing project benefits to target common good projects. Benefits have to be long term, extending even beyond the end of a project. Further, revenue agreements must be equal and fair. In light of this, projects should be realistic with ongoing operation costs and budget accordingly. Finally, the benefit sharing mechanism should adhere to all requirements under national legislation.

✿ **Outside pressures:** Continuous pressure on land for large-scale infrastructure projects (roads, rail, mining, and electricity transmission) without proper mitigation of environmental and biodiversity impacts can present a very real challenge in project areas.

✿ **Documentation is key:** Robust record keeping and database management is a crucial part of the validation and verification process. Without this, projects will fail to be validated, or fail to pass verification. It also helps in cases of investigations and audits.

✿ **Project expense:** Projects are costly in terms of time and expertise. It is important to secure flexible finance to pay for the high start-up costs of operationalising REDD projects (including validation and verification). Connections with an NGO third party can be helpful with this.

✿ **Transparency on revenue flow:** During the development stage, projects must try to avoid promising future revenues. It is vital to manage the expectations of stakeholders, so future potential income should be framed as a possibility, never as a guarantee.

✿ **Nesting at a national level:** Projects will need to work with the national government as they develop institutional and technical arrangements for adequately accounting for emissions reductions, in order to reduce problems of leakage, double counting, and double payment for emission reductions. Both existing and future projects need to be incorporated or nested into Kenya's national-level programs being developed in compliance with the Paris Agreement. Scaling up technical approaches from local REDD projects in the design of national systems is also a challenge. Kenya will have to adopt cost-effective modelling approaches for national-level programs, instead of costly systems that directly measure carbon stocks using sample plots of limited geographical size.

²⁷ [Offsetting human rights](#)

²⁸ [Wildlife Works official statement to Somo's Report](#)

- ✿ **Risk identification and risk management:** Risks such as legislative change, market and financial risk should be recognised. Indeed organisations like Verra require a non-permanence risk analysis score for the project at validation and verification. The project should build a strong team of expertise and experience with project staff, international partners, and consultants. All these factors assist the project to identify risks and respond adaptively, such as to market fluctuations, land subdivision, or increased fire risk.
- ✿ **Marketing:** Sales and marketing for carbon credits is challenging. This process needs to be well thought out and planned in advance. Potential buyers or brokers should be identified early on.
- ✿ **Project evolution:** A number of key elements of a carbon project, such as the governance of the project proponent entity, the methodology, etc. should remain unchanged during the project. Any material change of these key elements would have consequences, such as requiring re-validation. However, many aspects of implementation will naturally evolve over the course of the project. This might include refinement of the revenue-sharing process, grant management and changing strategic priorities to respond to changing circumstances, examples of which are fire management and sub-division. This is to be expected and accounted for in the documentation.
- ✿ **The power of impartial, expert advice:** As in any sector where novel financial revenue streams are created, and where the regulatory environment is not yet well established, the carbon market can attract unscrupulous actors motivated by profit. One of the best ways to protect yourself from falling victim to such people is to surround yourself with experienced people who have no financial stake in the success of the project. Do this as early as possible. Contract the services of sectoral experts (legal, financial, carbon measurement, governance etc.) to conduct deep due diligence on all potential project partners. If in doubt, err on the side of caution, and ensure that you and your team deeply understand every step of the process and can communicate it clearly to the full diversity of your community stakeholders.

Part 5

The Future of Carbon Markets



The carbon sector is constantly and rapidly evolving. It is crucial for conservancies, and their partners, who are implementing carbon projects, to stay informed and current in light of this evolution. The following key areas are of particular relevance for conservancies:

Evolving regulatory requirements

It is important for project proponents to engage with and understand how policy developments may impact the process of establishing and implementing their carbon project, for example: the regulations of REDD nesting and potentially the number of credits that it can generate, as well as any additional requirements, such as possible profit share with Government. It is highly likely that there will be increased coordination required between project level actors and government, including need for authorisation by government. Kenya is currently developing this guidance and projects are encouraged to engage and stay alert for new regulations.

Carbon prices

Carbon pricing mechanisms, like carbon taxes or cap-and-trade systems, put a monetary value on the emission of carbon dioxide and other GHG, creating economic incentives for reducing emissions. However carbon prices fluctuate depending on many factors including supply and demand, regulatory policies and caps, speculation and investment trends, and political stability. This market uncertainty introduces financial risks for carbon projects, particularly those which are entirely dependent on carbon revenue. It is crucial for carbon projects in conservancies to stay abreast of these shifting trends, secure ongoing support from market experts and plan accordingly.

Grouping or scaling your project

Grouping a carbon project refers to the process of combining multiple smaller carbon projects into a single, larger project. This approach is often used to reduce costs, simplify management, and enhance the impact of carbon offset initiatives. This is only possible under some standards (e.g. Verra's Verified Carbon Standard) and if the existing project has met all the standard's requirements. The process involves significant input methodologically and financially: securing more funding and partnerships, standardising strategy and monitoring etc. Using VCS requirements for grouped projects, a project proponent may avoid undergoing a full validation for each new instance added to the project. This can allow projects to scale up over time and reduce transaction costs.

Continuing your project

The carbon sector has faced the criticism of 'what happens next?' after a project has finished. For example, if a project has successfully completed its lifespan and led to the protection of a forest and the restoration of a rangeland for 30 years, but is unable to continue beyond its project lifespan, are all of the climate benefits then undermined? Standards set the rules for credit issuance over the chosen lifespan of the project. Since the sector is relatively nascent and evolving, there are on-going discussions about how projects might continue into the future.

Biodiversity offsets

Biodiversity offsets are conservation actions intended to compensate for harm to biodiversity caused by development projects that cannot be avoided, minimised or remediated. They usually involve protecting, restoring, or enhancing biodiversity elsewhere to a level that matches or exceeds the biodiversity lost due to the development. The goal of biodiversity offsets is to achieve no net loss, and preferably a net gain, of biodiversity. However, they are controversial²⁹. Critics argue that offsets can be used to justify damaging environmentally sensitive areas, and that it can be very difficult to truly compensate for the loss of complex and unique ecosystems. They also argue that biodiversity offsets assume that the values of biodiversity in complex ecosystems can be isolated from their spatial, evolutionary, historical, social, and moral context³⁰. Proponents, on the other hand, see them as a pragmatic solution to balancing development and conservation needs³¹.



²⁹ Bull JW, Suttle KB, Gordon A, Singh NJ, Milner-Gulland EJ. Biodiversity offsets in theory and practice. *Oryx*. 2013;47(3):369-380.

³⁰ Moreno-Mateos, D., Maris, V., Béchet, A., Curran M., (2015) The true loss caused by biodiversity offsets. *Biological Conservation*, 192, 552-559

³¹ Maron, M., Gordon, A., Mackey, B., Possingham, H., Watson, J. (2016) Interactions Between Biodiversity Offsets and Protected Area Commitments: Avoiding Perverse Outcomes. *Conservation Letters* 9., 384-389

Part 6

Additional Resources



6.1. General

01. Survival International Report on the North Kenya Rangelands Carbon Project (NKRCP) https://assets.survivalinternational.org/documents/2466/Blood_Carbon_Report.pdf?_gl=1*1q0f79s*_ga*MTM5ODIzNTU4OC4xNzA1NTc5MTc1*_ga_VBQT0CYZ12*MTcwNTU3OTE3NS4xLjAuMTcwNTU3OTE3NS4wLjAuMA..
02. SOMO report on the Kasigau Corridor REDD Project <https://www.somo.nl/systemic-sexual-abuse-at-celebrated-carbon-offset-project-in-kenya/>
03. Snyman, S., Sumba, D., Vorhies, F., Gitari, E., Ender, C., Ahenkan, A., Pambo, A.F.K., & Bengone, N. (2021). State of the Wildlife Economy in Africa. African Leadership University, School of Wildlife Conservation, Kigali, Rwanda. <https://policycommons.net/artifacts/1817148/state-of-the-wildlife-economy-in-africa/2554072/>
04. Carbon Tanzania: The Importance of Protecting Forests <https://www.carbontanzania.com/wp-content/uploads/2021/10/The-importance-of-protecting-forests.pdf>
05. NRT's Statement regarding the Survival International Report <https://www.nrt-kenya.org/news-2/2023/3/23/statement-regarding-the-survival-international-report#:~:text=The%20report%20claims%20that%20leakage,be%20issued%20from%20the%20project.->
06. Bull JW, Suttle KB, Gordon A, Singh NJ, Milner-Gulland EJ. Biodiversity offsets in theory and practice. *Oryx*. 2013;47(3):369-380. <https://www.cambridge.org/core/journals/oryx/article/biodiversity-offsets-in-theory-and-practice/EDBF70717C273662B6D8EE0876370095>
07. Moreno-Mateos, D., Maris, V., Béchet, A., Curran M., (2015) The true loss caused by biodiversity offsets. *Biological Conservation*, 192, 552-559 <https://www.sciencedirect.com/science/article/abs/pii/S0006320715300665>
08. Maron, M., Gordon, A., Mackey, B., Possingham, H., Watson, J. (2016) Interactions Between Biodiversity Offsets and Protected Area Commitments: Avoiding Perverse Outcomes. *Conservation Letters* 9, 384-389 <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12222>
09. Synthesis Report of the IPCC Sixth Assessment Report (AR6) <https://reliefweb.int/report/world/synthesis-report-ipcc-sixth-assessment-report-ar6>
10. The Climate Change (Amendment) Bill (2023) <http://www.parliament.go.ke/sites/default/files/2023-08/THE%20CLIMATE%20CHANGE%20%28AMENDMENT%29%20BILL%2C%202023.pdf>
11. Carbon Tanzania Impact Report 2021 <https://www.carbontanzania.com/wp-content/uploads/2022/05/impact-report-2021-web.pdf>
12. Carbon Tanzania Impact Report 2020 <https://www.carbontanzania.com/wp-content/uploads/2021/08/impact-report-web-double-1.pdf>
13. Ministry of Environment and Forestry, The National REDD Strategy, December 2021 <https://www.un-redd.org/document-library/kenyas-national-redd-strategy>
14. Final Report Performance Evaluations of the Keo Seima Conservation Project (Kscp) and the Wildlife Sanctuary Support Program (WSSP) https://pdf.usaid.gov/pdf_docs/PA00X8HG.pdf

6.2. Project conceptualisation and financing

16. KWCA's FPIC: A Guide for Conservancies in Kenya
<https://kwcakenya.com/download/free-prior-and-informed-consent-fpic-a-guide-for-conservancies-in-kenya-october-2023/>
17. The Carbon Credits Trading and Benefit Sharing Bill (2023)
<https://kwcakenya.com/wp-content/uploads/2023/08/Carbon-Credit-Trading-Bill-Eighth-draft.pdf>
18. The Natural Resource (Benefit Sharing) Bill (2022)
<http://www.parliament.go.ke/sites/default/files/2023-08/Senate%20Bill%20no6%20on%20the%20Natural%20resources%20benefit%20sharing%20bill%202022.pdf>
19. Carbon Finance Playbook: Demystifying the capital raising process for Nature-based Carbon Projects in Emerging Markets <https://crossboundary.com/wp-content/uploads/2023/12/PLANETA-Carbon-Finance-Playbook.pdf>
20. Architecture for REDD Transactions, the REDD Environmental Excellence
<https://www.artredd.org/trees/>
21. Benefit Sharing at Scale: Good Practices for Results-Based Land Use Programs
<http://hdl.handle.net/10986/32765>
22. The Carbon Finance Handbook
<https://www.hamerkop.co/landing-page-ebook>
23. Securing Climate Benefit: A Guide to Using Carbon Offsets
https://www.offsetguide.org/wp-content/uploads/2020/03/Carbon-Offset-Guide_3122020.pdf

6.3. Project development and monitoring

24. Chandrasekharan Behr, Diji. 2012. Making Benefit Sharing Arrangements Work for Forest-Dependent Communities: Overview of Insights for REDD Initiatives. Washington, DC: Program on Forests (PROFOR)
<http://hdl.handle.net/10986/12617>
25. Rooting for Change: STRENGTHENING LOCAL - GLOBAL PARTNERSHIPS IN AFRICAN CONSERVATION
<https://www.maliasili.org/rootingforchange>
26. Transforming REDD: Lessons and new directions
<https://doi.org/10.17528/cifor/007045>
27. The Nature Conservancy's 'Natural Climate Solutions Handbook: A Technical Guide for Assessing Nature-Based Mitigation Opportunities in Countries' https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_Natural_Climate_Solutions_Handbook.pdf
28. The Nature Conservancy's 'Rangeland carbon projects for communities: A guide on climate change, rangeland health, livestock grazing and carbon markets' <https://www.nature.org/en-us/what-we-do/our-insights/reports/>
29. Warsaw Framework on REDD
<https://redd.unfccc.int/fact-sheets/warsaw-framework-for-redd.html>
30. Jurisdictional and Nested REDD Framework (JNR)
<https://verra.org/programs/jurisdictional-nested-redd-framework/>
31. VERRA <https://verra.org/>
34. Plan Vivo Standard (PVS) <https://www.planvivo.org/>
33. Verified Carbon Standard (VCS) <https://verra.org/programs/verified-carbon-standard/>
34. Gold Standard (GS) <https://www.goldstandard.org/>

6.4. Credit issuance and sales

35. Carbon Tanzania: What is a forest-based carbon credit?
<https://www.carbontanzania.com/wp-content/uploads/2021/10/What-is-a-carbon-credit.pdf>
36. The European Union Emissions Trading System (EU ETS)
https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en

6.5. Background information on carbon market developments

35. Article 6 Explainer: Questions and Answers About the COP27 Decisions on Carbon Markets and What They Mean for NDCS, Nature, and the Voluntary Carbon Markets https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_Article_6_Explainer_260523.pdf
36. To trade or not to trade? Options for Operationalizing Corresponding Adjustments Under Article 6
https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_To_Trade_or_Not_to_Trade_150523.pdf

The Voluntary Carbon Market Explained <https://vcmprimer.org/>

Beyond Beneficiaries: Fairer Carbon Market Frameworks
<https://nature4climate.org/natures-solutions/latest-scientific-papers/beyond-beneficiaries/>

Integrity Council for the Voluntary Carbon Market <https://icvcm.org/>

The Taskforce for Scaling Voluntary Carbon Markets <https://www.iif.com/tsvcm>

Africa Carbon Markets Initiative (ACMI) Initiative Report Summary https://pmiclimat.org/sites/default/files/2023-04/Africa%20Carbon%20Markets%20Initiative%20%28ACMI%29%20Overview_Teleola%20Oyegoke_0.pdf

Chasing Carbon Unicorns: The deception of carbon markets and “net zero” <https://www.foei.org/publication/chasing-unicorns-carbon-markets-net-zero/>

Annex 1: Carbon projects on conservancies in Kenya

Project Name	Registry	Project Area	Project Area (Hectares)	Project Duration (Years)	Crediting years	Methodology	Total Estimated Project ER (tCO2e)	Average Annual Project ER (tCO2e)	Estimated net GHG emission reductions or removals (tCO2e)	Project Status
The Kasigau Corridor REDD+ Project – Phase I Rukinga Sanctuary	VERRA & SD VISTa	Rukinga Sanctuary/Ranch (tropical dryland forest)	30,169	30	30	VM0009	6,034,356	201,145	6,034,356	Registered
The Kasigau Corridor REDD+ Project - Phase II The Community Ranches	VERRA & SD VISTa	Rukinga Sanctuary/Ranch (tropical dryland forest)	169,741.4	30	30	VM0009	38,759,015	1,291,967	38,759,015	Registered
Northern Kenya Grassland Carbon Project	VERRA & CCB	Northward from the northern slopes of Mt. Kenya toward the Ethiopia border	1,993,075	30	30	VM00032	50,000,000	1,666,667	50,000,000	Under verification
Tsavo-Amboseli Ecosystem (Makueni County, Taita Taveta County, and Kajiado County)	VERRA & CCB	Chyulu Hills REDD+ Project	410,533	30	30	VM0009	33,028,286	1,100,943	33,028,286	Registered
Kajiado Rangelands Carbon Project	VERRA	Kajiado County	1,000,000	40	40	VM00032	64,199,065	1,604,977	64,199,065	Under verification
One Mara Carbon Project	VERRA	Narok County	300,000	30	30	VM00032	16,549,097	551,636	16,549,097	Under development
Tsavo Livelihood Initiative carbon project	Not registered	Taita Taveta, Makueni, Kilifi, Kwale counties	246,157	30	30	VM0032/ VM0048	6,599,160	219,972	6,599,160	Feasibility Stage
LCA Restoration Project	Not registered	Laikipia County	394,191	40	40	Not decided	7,200,000	772,800	7,200,000	Feasibility Stage
TOTAL							222,368,979	7,410,107	222,368,979	

Annex 2: Project Idea Note

Carbon Project Note

Part 1 – Basic Project Info

Project name	
Location and size	Country, region, and the project area size in hectares
Applicant's organisation	This is the leading project proponent. This organisation will be responsible for receiving funding and reporting on the project. Include website, if applicable
Contact information	Provide the name, title, and email of the person/persons within the applicant organisation responsible for ensuring the successful implementation of the project.
Other implementing partners	These are any organisations directly involved in the implementation of project activities. This may include government, businesses, and other NGOs.
Natural Climate Solution pathways deployed by the project that will generate the majority of climate benefits	<p>Double click in the box to check the option:</p> <p><input type="checkbox"/> Forest protection and conservation (REDD)</p> <p><input type="checkbox"/> Afforestation, Reforestation, and Revegetation (ARR)</p> <p><input type="checkbox"/> Grassland conservation and/or restoration</p> <p><input type="checkbox"/> Agroforestry</p> <p><input type="checkbox"/> Improved Forest Management (IFM)</p> <p><input type="checkbox"/> Wetland and blue carbon conservation</p> <p><input type="checkbox"/> Wetland and blue carbon restoration</p> <p><input type="checkbox"/> Other. Describe:</p>
Project Summary	Provide a concise summary of the project (250 words max), outlining why the project is needed, its goal and main activities, expected outcomes and conservation impact, and the overall project costs and timescale.

Part 2 – Project Design

Description of project location and	Describe the project location, ecosystem type, land cover and main habitats and their condition. Please include maps as an annex indicating any places or areas referenced within the project description, and are ideally accompanied with supporting spatial data of the project boundaries (Google KML file, GIS files or GPS points).
Causes of deforestation/ ecosystem degradation or barriers to reforestation/ carbon enhancement	<p>Describe the problem that is causing GHG emissions. Describe the major causes of deforestation/ ecosystem degradation if the project is to reduce emissions. – OR – Describe the barriers to reforestation/ carbon enhancement if the project is to remove emissions. Include an explanation of the underlying causes of those threats and barriers and the agents.</p> <p>Focus on threats that have direct consequences for carbon stocks within the project area. Threats may include expansion of agricultural land, over grazing of ecosystem, clear-fell deforestation, illegal deforestation, water abstraction, or mining and infrastructure development etc. Explain any transitional processes linked to threats, e.g. overgrazing and firewood collection making forest areas vulnerable to fire which is then used to remove remaining tree cover.</p>

Mitigation/ Conservation Action Plan	<p>Describe the strategies and actions to mitigate the threats OR overcome the barriers described above, making the direct link between how the strategies will minimize the underlying causes and achieve the expected results (e.g., strong results chain or theory of change). The project might not have a finalised mitigation plan, but a good idea of the strategies should be presented.</p> <p>Examples of the key project conservation activities may include strengthening protected area status through land tenure and legal designations processes, active protection enforcement and patrolling, community engagement and empowerment, livelihood support, research, surveying and monitoring, and business and sustainable revenue development. Include details of how these activities will be designed, delivered, and implemented.</p> <p>Include the description of the status and history of activities undertaken by the organisation in the project area.</p>
Capacity of implementation/ partner organisations	<p>Describe which organisation(s) will ultimately be responsible for the ongoing implementation of the Mitigation Action Plan (e.g., strategies on the ground). Detail their capacity and expertise. If those organisations or capacity is not yet identified, explain how the project intends to implement the Mitigation Action Plan.</p>
Risk assessment	<p>List all the material risks to the project's success, including political, financial, policy-related, social, reputational, natural disasters, and project implementation/delivery risks. Describe any strategies to mitigate these risks.</p>

Part 3 – Carbon Accounting

Carbon standard and methodology	<p>List the likely carbon certification standard and associate methodologies or modules to be used. Describe how the project meets the applicability criteria for the selected methodology.</p> <p>Include the estimated project start date and crediting period.</p>
Climate benefits	<p>Total potential GHG emissions removal and/or reductions over the project crediting period (e.g., 30y). Attach the spreadsheet with the calculations and includes the assumptions and parameters (e.g., effectiveness in reducing the historical deforestation rate, average carbon stock of mature forest...)</p>
Accurate/ conservative baseline	<p>Describe the “business-as-usual” scenario detailing what would happen in the project area without the project intervention, considering the nature, magnitude, and timing of the land-use changes. Describe the historical rates of deforestation/degradation, historic or common practice forestry or land management practices, or carbon increment/growth rate (where applicable) and demonstrate that they are accurate and conservative. Describe any assumptions or parameters that will be further revised to improve accuracy.</p>
Permanence	<p>Describe how the project plans to reduce the risk of carbon losses during and after the crediting period (e.g., 100y). Include the description of any mechanisms/tools that will ensure the permanence of carbon stock.</p>
Leakage	<p>Describe how the project assesses the risk of leakage and, if considered material, describe the mitigation plan.</p>
Additionality	<p>Clearly describe how activities that generate climate benefits would not have occurred without the direct project intervention. Special attention to Regulatory Surplus (i.e., demonstrate that the project is not mandated by any systematically enforced law, statute, or other regulatory frameworks) and financial additionality (i.e., demonstrate that climate benefits would not occur without the incentive of carbon finance)</p>

Part 4 – Financial Sustainability

Project Costs	Provide the total and average annual cost of the project. Describe all the costs associated with the project, including the establishment, implementation, carbon certification, and program administration costs. Include as an annex the spreadsheet with cost estimation per year and parameters (e.g., inflation rate, currency exchange rate, verification schedule, government fees, or royalties...), if available.
Project Revenues	Describe all anticipated sources of project revenues, including carbon (e.g., sales of carbon credits) and non-carbon sources (e.g., philanthropy, government financial incentives, timber revenue, shade-grown coffee, etc.). If a potential carbon buyer has been identified, please share relevant details.
Financial model	Describe the financial model based on the costs and carbon outputs. Include as an annex the spreadsheet with the financial model and parameters (e.g., carbon price escalator, currency exchange rate, sale taxes...), if available. Resources: Carbon Project financial model [optional]
Minimal carbon price	Based on the carbon model and the assumption and caveats, describe what the breakeven carbon price is (e.g., at 10-y and end of crediting period)
Long-term financial mechanism	Describe the long-term financial mechanism that will ensure financial benefits to the beneficiaries after the crediting period. (e.g., an endowment fund for Protected Area management, establishing livelihood opportunities, strengthening production/value chain...). If the mechanism is not yet defined, list some ideas that could be explored.

Part 5 – Financial Sustainability

Property Ownership/ Land Tenure and Carbon Rights	Describe the project area's current ownership, management rights, and status for land, resources (e.g., timber, NTFP), and carbon. If land tenure or carbon ownership is unclear, describe the actions that will enable carbon credit generation and commercialisation.
Integration with national accounting and relevant laws	<p>Briefly describe the status of voluntary and regulatory carbon markets in the country, including existing government laws, policy frameworks, and regulations governing the project area.</p> <p>Describe any advance regarding Article 6, including if the country has a compliance market or any NCS Article 6 pilots, and if international cooperation under Article 6 might impact the NDC achievement.</p> <p>Explain the measures to avoid double counting or claiming with national accounting (e.g., NDCs)</p> <p>Describe if the project has received or should have any authorisation, or endorsement from the national or regional government to be implemented.</p>
Minimal carbon price	Describe any legal agreement already established, including any revenue sharing agreements, and list the anticipated agreement between the stakeholder to facilitate the generation, transfer of rights, or commercialisation of the carbon credits.

Part 6 – Financial Sustainability

Governance structure	Briefly describe, or create a diagram showing the governance structure, the role of key stakeholders, and the flow of funds and carbon credits. Include any legal agreement that must be arranged. See example below.
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Stakeholder mapping and engagement plan	List the key stakeholders involved in the project, including the carbon owners, impacted communities, and rights holders. Describe their role and the level of involvement at this stage. Provide any information regarding the stakeholder engagement plan you might have.
Equitable and fair benefit-sharing mechanism	Describe the anticipated revenue share and flows of benefits, with particular attention to carbon market income and communities. If the benefit-sharing mechanism is not designed yet, describe the plan to develop it.
Participation of vulnerable communities and underrepresented groups	Describe the project's potential negative impact on vulnerable and underrepresented groups. Describe how the project plans to develop social safeguards to ensure an active and effective participation of those groups.
Safeguards and Co-benefits to communities	Briefly describe safeguards that will be implemented to do no harm to communities and any expected positive impact and co-benefits on communities due to the project activities and how the project ensures that those benefits will last beyond the carbon crediting period.
Safeguards and Co-benefits to biodiversity	Briefly describe the biodiversity in the region of the project area, including any if the project is part of any Biodiversity Hotspots or any high conservation importance. Briefly describe safeguards that will be implemented to do no harm to biodiversity and any expected positive impact and co-benefits on biodiversity due to the project activities and how the project ensures that those benefits will last beyond the carbon crediting period.

Part 7 – Implementation

Timeline	Describe the general project goals, key milestones and desired timeline, including implementation, validation, and verification events. Please describe any hard time constraints that could impact the execution of this project. Add the general work plan if available.
Technical expertise/ support needed	Work with your Technical Team Liaison to fill in the NCS Accelerator budget template to describe the support needed to establish and implement the project.



Kenya Wildlife Conservancies Association

Living nature, Living people

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