# THE UNITED REPUBLIC OF TANZANIA
# NATIONAL AUDIT OFFICE

ISO 9001:2015 Certified

# PERFORMANCE AUDIT REPORT ON THE MANAGEMENT OF CARBON TRADE IN TANZANIA


CONTROLLER AND AUDITOR GENERAL
MARCH 2025

## About the National Audit Office

### Mandate

The statutory mandate and responsibilities of the Controller and Auditor General are provided under Article 143 of the Constitution of the United Republic of Tanzania, 1977 and in Section 10 (1) of the Public Audit Act, Cap. 418.

## NAOT Vision, Mission & Motto

**Vision**

A credible and modern Supreme Audit Institution with high-quality audit services for enhancing public confidence.

**mission**

To provide high-quality audit services through modernization of functions that enhances accountability and transparency in the management of public resources.

**Motto**

Modernizing External Audit for Stronger Public Confidence

## Core Values

**Independence and Objectivity:** We are an impartial public institution, independently offering high-quality audit services to our clients in an unbiased manner.

**Integrity:** We observe and maintain high ethical standards and rules of law in the delivery of audit services.

**Results-Oriented:** We focus on achievements of reliable, timely, accurate, useful, and clear performance targets.

**Professional competence:** We deliver high quality audit services based on appropriate professional knowledge, skills, and best practices.

**Creativity and Innovation:** We encourage, create and innovate value-adding ideas for the improvement of audit services.

**Team Work Spirit:** We value and work together with internal and external stakeholders.

## PREFACE

Pursuant to Section 28 of the Public Audit Act, CAP 418, I am mandated to conduct a Performance Audit (Value-for-Money Audit) to establish the economy, efficiency and effectiveness of any expenditure or use of resources in the Ministries, Departments and Agencies (MDAs), Local Government Authorities (LGAs) and Public Authorities and Other Bodies which involves enquiring, examining, investigating and reporting, as deemed necessary under the circumstances.

I have the honour to submit to Her Excellency Hon. Dr. Samia Suluhu Hassan, the President of the United Republic of Tanzania and through her, to the National Assembly of the United Republic of Tanzania, the Performance Audit Report on the Management of Carbon Trade in Tanzania.

The report contains findings, conclusions, and recommendations that are directed to the Vice President's Office (VPO) and the National Carbon Monitoring Centre (NCMC). These entities were given the opportunity to review the report and provide comments, and I sincerely acknowledge that their inputs were constructive and valuable.



My Office will carry out a follow-up audit at an appropriate time regarding action taken in implementing the recommendations given in this report.

I would like to extend my sincere gratitude and appreciation to the audited entities for their cooperation, which facilitated the timely completion of this audit. Finally, I commend the dedication and hard work of my staff in preparing this report.

Charles E. Kichere
**Controller and Auditor General**
**The United Republic of Tanzania**
**March 2025**

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## LIST OF ABBREVIATIONS & ACRONYMS

| | |
|---|---|
| BAU | Business-As-Usual |
| CCIAM | Climate Change Impacts, Adaptation & Mitigation |
| COP | Conference of Parties |
| CSR | Corporate Social Responsibility |
| GHG | Greenhouse Gases |
| IRA | The Institute of Resource Assessment |
| ITAC | International Transparency and Accountability Conference |
| LUCF | Land-Use Change and Forestry |
| MEAs | Multilateral Environmental Agreements |
| $MtCO_2$ | Metric Tons of Carbon dioxide |
| NCCFP | National Climate Change Focal Point |
| NCMC | National Carbon Monitoring Centre |
| NDCs | Nationally Determined Contributions |
| REDD+ | Reduced Emissions from Deforestation and Forest Degradation in Developing Countries |
| SDGs | Strategic Development Goals |
| SUA | Sokoine University of Agriculture |
| TFS | Tanzania Forest Service |
| UNFCCC | United Nations Framework Convention on Climate Change |
| VPO | Vice President's Office |

## DEFINITION OF TERMS

| | |
|---|---|
| **Appropriate Authority** | The Designated National Authority and/or National Focal Point and Responsible Authority are responsible for coordinating environmental management and climate change. |
| **Business-As-Usual (BAU) scenario** | Refers to a projection of future emissions assuming no significant changes in policies, technology, or practices. |
| **Carbon Credit** | A tradable permit or certificate that gives the right to emit one ton of carbon dioxide or an equivalent of another greenhouse gas. |
| **Carbon Market** | Carbon pricing mechanisms that enable Governments and Non-state actors to trade greenhouse gas emission credits. |
| **Carbon Trading** | This means buying and selling carbon credits under a recognised international carbon standard. |
| **Designated National Authority or National Focal Point** | This means the ministry designated under the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) to coordinate environmental and carbon trade-related matters in the country. |
| **Greenhouse Gases (GHGs)** | This means those gases in the atmosphere that cause climate change. |
| **Managing Authority** | Means the owner of the property involved in the carbon trading project. |
| **National Carbon Projects Assessment Technical Committee** | This means an ad hoc committee constituted by the Designated National Authority or National Focal Point to review and scrutinise the submitted Project Concept Note or Project Document. |
| **Project Document** | This means a document with a detailed description of the carbon trading project. |
| **Project Proponent** | An individual or legal person engaging in the implementation of a carbon trading project. |
| **REDD+** | This means reducing emissions from deforestation and forest degradation as well as the role of conservation, |

| | |
|---|---|
| | sustainable management of forests and enhancement of forest carbon stocks in developing countries. |
| **Relevant Authority** | This means any Government institution responsible for registering entities involved in carbon trading projects. |
| **Voluntary Carbon Market** | This means a carbon trading regime that transacts all carbon credit outside the official United Nations Framework Convention on Climate Change mechanism. |

## EXECUTIVE SUMMARY

### Background of the Audit

Tanzania is dedicated to various strategies contributing to global efforts to reduce greenhouse gas (GHG) emissions, including active participation in carbon trading. Thus, it is actively engaged in carbon trading to meet its emission reduction targets, selling carbon credits in both compliance and voluntary markets. These markets offer financial incentives for emission reductions. By July 2024, the Government had generated a total of TZS 36 billion from these activities as financial rewards for its efforts to lower emissions.

The main objective of the audit was to assess the effectiveness of the Vice President's Office (VPO) in managing carbon trade, which aims to reduce greenhouse gas emissions and promote economic growth through revenue generated from carbon credits.

### Main Audit Findings

#### (a) Extent of Implementation of Carbon Trading Activities in the Country



The audit noted inadequate alignment of the regulatory framework with international agreements, limiting the country's participation in global carbon markets. The Audit further noted that Tanzania underutilised its carbon trading potential. For example, between January 2023 and July 2024, only four (4) out of 56 registered carbon trade projects in Tanzania had progressed to the implementation phase, while the remaining 52 were still in the planning stages.

Moreover, the Audit noted that there was limited public and private sector engagement, hindering the effectiveness of carbon trade projects in Tanzania. Consequently, the majority of registered projects (87%) were focused on the forestry (55%) and energy (32%) sectors. Smaller portions were focused on Agriculture (7%), Waste Management (4%), and Livestock (2%). Despite their potential for carbon trading, no carbon projects were registered in the transport or industrial processes and product use sectors. This was attributed to the lack of proper guidance and sensitisation for the effective utilisation of carbon trading opportunities, which led to insufficient revenue generation. Thus, the amount raised was only TZS 36 billion, which is just 3% of the projected TZS 1.26 trillion.

**(b) Inadequate Collection, Analysis, Reporting and Dissemination of Key Information such as Baseline Data of Greenhouse Gases**

The audit acknowledges that the Vice President's Office (VPO), through the National Carbon Monitoring Centre (NCMC) and the project proponents, successfully collected, analysed, reported, and disseminated baseline information. However, discrepancies were identified, including the use of outdated national baseline data, as nearly 10 years had passed since the last update was conducted. It was further provided that the current baseline information (GHG inventory) was limited to the forestry sector, neglecting other essential sectors such as energy, transport, and industry, which are also key contributors to greenhouse gas emissions.

The audit also noted that there was neither a mechanism in place for developing and updating baseline data nor for reporting and disseminating such data. Specifically, the Audit noted that the Vice President's Office inadequately measured, reported, validated and verified baseline data which were reported by proponents from different carbon trade projects. It was further revealed that carbon trade projects rely on the international database that maintains records of carbon trading activities. Such a tendency hampers Tanzania's participation in global carbon trading and affects GHG emissions tracking.

**(c) Ineffective Management of the Initiation and Planning of Carbon Trading Activities in the Country**

The audit noted that the Vice President's Office (VPO), through the National Carbon Monitoring Centre (NCMC), did not effectively manage the initiation and planning of various carbon trade projects. This was evident in the delays in reviewing and scrutinising the project proponents' concept notes and project documents, with 71% of the registered projects experiencing delays during the process.

The audit also noted inadequate verification of the project proponents' capacity to engage in carbon trade. Furthermore, the VPO did not adequately coordinate the functions of the National Carbon Projects Assessment Technical Committee. This resulted from the lack of resources for timely review and scrutiny of carbon trade projects, including expertise and financial capacity, hampering the VPO's ability to track progress and ensure compliance with regulatory and environmental standards.

**(d) Inadequate Guidance Over the Management of Contractual Agreements between Parties Involved in Carbon Trade**

The audit noted that the Vice President's Office (VPO) did not adequately guide the management of the contractual agreements between parties involved in carbon trade. This was reflected by the lack of facilitation to ensure the engagement of competent staff in preparing and signing the contracts. Furthermore, the VPO did not emphasise the involvement of the Office of the Attorney General in vetting the contracts despite the complexity and sensitivity of the carbon trade projects. The VPO neither ensured that the contractual agreements included provisions to enhance environmental (forest) conservation nor established robust follow-up mechanisms to ensure compliance with these measures. This was attributed to the absence of standardised procedures, which compromised the legal validity of the contractual agreements.

**(e) Inadequate Management of the Implementation of Carbon Trade in the Country**

The audit noted irregularities in the management of carbon trade projects by the Vice President's Office (VPO). The VPO did not adequately undertake monitoring and evaluation processes for these projects, making it difficult to track progress. The audit also noted that there was a lack of transparency in the pricing of carbon credits, suggesting that the precise price of the carbon credits, which generated TZS 36 billion from January 2023 to July 2024, remains undisclosed.

It was further noted that there was a lack of accountability in the utilisation of revenue generated from carbon trading. This was evident as the revenue generated from carbon credits was treated as general income and redirected to other activities rather than being prioritised for initiatives that directly reduce greenhouse gas (GHG) emissions or enhance carbon sequestration. As a result, key efforts such as forest conservation, which should have been the primary focus according to established guidelines, received insufficient attention and support.

In addition, the VPO did not coordinate the carbon trade project proponent's fulfilment of Corporate Social Responsibility (CSR) commitments, which were essential for fostering sustainable development and benefiting local communities. This was caused by the lack of a well-defined institutional framework, thus hindering the ability to enforce compliance and the overall management of carbon trade projects effectively.

**Audit Conclusion**

The audit recognises that Tanzania, through VPO, participates in carbon trade to promote sustainable development and support global emission reduction efforts. Tanzania has distinguished itself in Africa by establishing comprehensive regulations and guidelines for managing carbon trade. The National Carbon Monitoring Centre (NCMC) plays a pivotal role in this effort, providing a framework along with cost and benefit-sharing arrangements for carbon trading, monitoring carbon emissions, and verifying carbon credits. However, it is concluded that the Vice President's Office (VPO) falls short to effectively managing carbon trade activities to reduce greenhouse gas emissions and stimulate economic growth through revenues generated from carbon credits.

Outdated GHG baseline data hamper the nation's carbon trading efforts. The Vice President's Office (VPO) does not effectively facilitate the initiation and planning of carbon trading projects, with issues like delayed review and scrutinisation of concept notes and project documents for carbon trade and inadequate verification of proponent qualifications. Furthermore, the implementation of carbon trade projects is not well coordinated and is characterised by inadequate monitoring and evaluation, lack of transparency in the pricing of carbon credits, and inadequate cost benefit-sharing, further undermining accountability and economic gains, limiting full benefits in carbon trading activities.

**Audit Recommendations**

The Vice President's Office is urged to:

(i) Strengthen the institutional framework for the carbon sector by elevating the National Carbon Monitoring Centre (NCMC) to a fully-fledged institution;

(ii) Establish and oversee means to enable timely review and scrutinisation of the Carbon Trade Project, including the expertise and financial capacity of project proponents;

(iii) Establish and oversee procedure/guidance to ensure standardised procedures of contractual agreements on carbon trade projects;

(iv) Establish and implement systems to enhance coordination, regular monitoring, and evaluation of carbon trading projects, ensuring transparency in all processes and procedures; and

(v) Develop and operationalise the national carbon crediting mechanism to ensure transparency in the pricing of carbon credits.

## CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Audit

The United Republic of Tanzania is a party to the United Nations Framework Convention on Climate Change of 1992, the Kyoto Protocol of 1997, and the Paris Agreement of 2015. These treaties call on member states to reduce Greenhouse Gas (GHG) emissions in the atmosphere, a source of climate change[1].

According to the World Resources Institute Climate Analysis Indicators Tool (WRI CAIT), 73% of Tanzania's GHG emissions come from the Land-Use Change and Forestry (LUCF), followed by agriculture, energy, waste and industrial processes, contributing 17%, 8%, 1% and 1%, respectively. The LUCF was leading due to high levels of deforestation, agricultural expansion, livestock grazing, wildfires, unsustainable exploitation of wood resources, and other human activities such as construction. However, the country still remains among the least emitters in the world. Tanzania has additionally committed to reducing greenhouse gas emissions economy-wide by 30-35%, relative to the Business-As-Usual (BAU) scenario, by 2030[2].

The greenhouse effect is the primary driver of climate change, and carbon trading is one of the key market-based mechanisms employed to reduce greenhouse gas emissions into the atmosphere. Carbon trading, therefore, provides economic incentives[3] for emission reduction. Under this trade, carbon units or allowances (representing one metric ton of carbon dioxide ($CO_2$) or its equivalent ($CO_2e$) in other greenhouse gases) are purchased or traded as carbon credits[4]. These credits are measurable, verifiable, and certified in the carbon market. They represent a permit or certificate that allows the holder to emit a specific amount of carbon dioxide or equivalent

[1] Vice President's Office National Carbon Trading Guidelines October, 2022
[2] Tanzania's Nationally Determined Contribution, 2021
[3] This includes payments or investments in carbon credits, offsets, or cleaner technologies to compensate for or reduce emissions.
[4] Carbon Markets - An overview - Carbon Market Institute, 2021 (https://carbonTradeinstitute.org/app/uploads/2021/06/CMI_Fact_Sheet_2_Carbon-Trades-101.pdf)

greenhouse gases, typically one metric ton. Organisations can earn, buy, or sell these credits, incentivising activities that reduce emissions, such as renewable energy projects, reforestation, or energy efficiency initiatives.

Tanzania has, therefore, developed regulations to control and manage carbon trading projects. The Regulations provide the legal framework necessary for ensuring sustainable development by enhancing environmental conservation and the country's contribution towards global efforts on greenhouse gas emissions reduction. The Tanzania National Carbon Trading Guidelines focus on tapping opportunities associated with carbon trading in line with existing carbon trading opportunities under the United Nations Framework Convention on Climate Change (1992), Kyoto Protocol (1997), and the Paris Agreement (2015).

Carbon trade market mechanisms operate through regulated (compliance) or voluntary markets and typically involve the trade of carbon credits or allowances. Compliance markets operate through a cap-and-trade system, where entities are allocated or required to purchase allowances representing permitted emissions, which can be traded if unused, or a baseline-and-credit system, where credits are issued for emissions below a set baseline and can be sold to other entities. In contrast, voluntary carbon markets allow participants to purchase carbon credits voluntarily and outside regulatory mandates in order to offset their emissions and achieve sustainability goals.

## 1.2 Motivation of the Audit

The motivation to carry out this audit came from the reported performance challenges in carbon trading management, highlighting the need to assess the overall management of carbon trade in the country in order to rectify the situation. Some of the reported issues are discussed below:

### 1.2.1 Underdeveloped Carbon Trade in Tanzania

The Report from the International Transparency and Accountability Conference (ITAC), organised by the Vice President's Office – Division of Environment and WAJIBU Institute of Public Accountability in 2023, indicated that there is an underdeveloped carbon trade in Tanzania. The report also highlighted that the cause of this challenge was the absence of effective oversight for the distribution of climate change mitigation/adaptation funds. The report also indicated that unmet promises made by developed nations to fund climate projects in developing countries were major causes for undeveloped carbon trade projects. An underdeveloped carbon trade poses several risks to reducing carbon emissions and facilitates inadequate realisation of local co-benefits such as sustainable development, green job creation, and environmental protection in host communities[5].

### 1.2.2 Insufficient Capacity and Awareness of the Carbon Trading

Tanzania does not have sufficient capacity to tackle climate change challenges, particularly the GHG emissions across all levels of administration. The entities involved include the Ministry responsible for Environment, Regional Administration and Local Governments; Sector Ministries, Climate Observation and Monitoring Institutions; Carbon Monitoring Institutions; and Research and Academic Institutions[6]. Furthermore, the 2023 report by WAJIBU Institute of Public Accountability on Strengthening Accountability for Climate Action revealed that institutional and community-level capacities are lacking in GHG monitoring, project development, and benefit-sharing mechanisms needed for effective carbon trading. The report also highlighted minimal awareness among potential investors and project developers regarding the benefits of carbon trading, which hinders their involvement.

### 1.2.3 Alignment to the International Requirements on GHG Emission

The United Republic of Tanzania is a signatory to key international climate treaties: the United Nations Framework Convention on Climate Change (1992), the Kyoto Protocol (1997), and the Paris Agreement (2015). These treaties provide mechanisms for countries to meet emission reduction commitments and engage in carbon trading.

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[5] https://www.carbonmarket-cooperation.gov.sg/our-article-6-cooperation/benefits-of-carbontrading/#:~:text=Carbon%20markets%20help%20to%20channel,insufficient%20policy%20and%20economic%20incentives.

[6] National Climate Change Strategy (2021 – 2026)

Article 6 of the Paris Agreement allows countries to cooperate voluntarily to achieve their Nationally Determined Contributions (NDCs). This enables countries that exceed their GHG emission reduction targets to sell surplus credits, thereby funding their climate actions and directing investments to areas where emissions reductions are most efficient.

The Paris Agreement also introduces new mechanisms for carbon trading to support mitigation and adaptation efforts, including initiatives to reduce emissions from deforestation, promote conservation, sustainable forest management, and enhance forest carbon stocks. It emphasises voluntary cooperation, cooperative approaches, and non-market mechanisms to achieve climate goals.

#### 1.2.4 Requirements for Making Tanzania Reduce its Emissions from Deforestation and Forest Degradation among Developing Countries by 2022

Tanzania embarked on a Reduced Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+) program in 2008, facilitated by the Norwegian Government.



The objective of the program was to facilitate Tanzania to actively contribute to the reduction of Greenhouse Gas (GHG) emissions through reduced deforestation, reduced forest degradation, and more sustainable forest management, as well as through conserving forests and increasing forest carbon stocks and subsequently benefits from global funding opportunities for ecosystem services. The program's goal was to make Tanzania REDD+ ready to implement the Paris Agreement and results-based payments institutionalised and operational by 2022. This motivated a need to review and assess the extent towards implementing this goal.

#### 1.2.5 Contribution to the Achievement of Sustainable Development Goals

SDG Number 13 urges different actors to take action to combat climate change and its impact. It is disrupting the national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow. People are experiencing the significant impacts of climate change, which include changing weather patterns, rising sea levels, and more extreme weather events. Greenhouse gas emissions from human activities are driving climate change and are continuing to rise. They are now at their highest levels in history. Without action, the world's average surface temperature is projected to rise over the 21st century and is likely to surpass 3°C this century; some areas of the world are expected to warm even more.

Based on its importance and established weaknesses above, and given that by July 2024, only TZS 36 billion was generated out of the potential annual revenue of TZS 1.26 trillion from carbon trade, which accounts for just 3% of the projected total revenue, the Controller and Auditor General decided to carry out a performance audit on the management of the carbon trade in the country to examine the actual situation and suggest areas for improvement.

## 1.3 Design of the Audit

### 1.3.1 Audit Objective

The main objective of the audit was to assess whether the Vice President's Office (VPO) has effectively managed carbon trade in the country to reduce greenhouse gas emissions and stimulate economic growth through revenue generated from carbon credits.

To achieve this objective, the audit specifically focused on assessing whether VPO through the National Carbon Monitoring Centre (NCMC) has:

***Specific Objectives***

(a) Adequately developed, and disseminated all key information such as baseline data for carbon trade in the country;

(b) Effectively managed the initiation and planning of the carbon trade in the country;

(c) Adequately guided the management of contractual agreements between parties involved in carbon trade in the country; and

(d) Adequately managed the implementation of carbon trade in the country.

Detailed audit questions and sub-questions are presented in **Appendix 2** of this report.

### 1.3.2 Audit Scope

The main audited entity was the Vice President's Office-Division of Environment (VPO-DoE) through the National Carbon Monitoring Centre (NCMC). The VPO is mandated to formulate policies, acts, regulations, and guidelines for the management of carbon trade in the country.

The NCMC operates under delegated authority from the VPO, with responsibilities to coordinate the National Carbon Projects Assessment Committee, register carbon trading projects under both compliance and voluntary mechanisms, measure, report, and verify greenhouse gases, and maintain a register of all carbon trading projects.

Additionally, the audit included the Ministry of Natural Resources and Tourism (MNRT) and President's Office - Regional Administration and Local Government (PO-RALG) through their sectoral implementers, Tanzania Forest Services Agency (TFS), Tanzania Wildlife Management Authority (TAWA) and Local Government Authorities (LGAs) as stakeholders. The Ministry of Energy (MoE) was also covered as one of the implementers of carbon trade in the country.

Furthermore, PO-RALG was selected as it is responsible for overseeing and coordinating the implementation of policies and guidelines related to carbon trading at the LGA level. Still, the Ministry of Natural Resources and Tourism and the Ministry of Energy are both responsible for providing sectoral technical, administrative and legal support on carbon trading.

Similarly, TFS, TAWA, and LGAs, all acting as managing authorities, were covered as they were responsible for preparing and implementing carbon trade projects as proponents or partners of the proponent. The LGAs were further assessed through the Managing Authorities, which are the Village/Mtaa/Community representatives, where carbon trade activities are conducted.

The audit covered the whole process of managing the carbon trade, including assessing whether baseline data development was adequately conducted, initiating and planning the carbon trade projects, whether contract agreements between parties were adequately managed, and whether the implementation of carbon trade projects was adequately undertaken.

Under the development and dissemination of all key information, such as baseline data, the focus was on assessing the presence and functioning of the mechanism for developing and reporting baseline data. Moreover, the team looked at the manner in which the baseline data were validated and utilised to enhance carbon trade activities. Regarding the management of initiation and planning of the carbon trade projects, the focus was on assessing how the project proponents were engaged. The audit further covered issues related to the verification of the project proponents' capacity for carbon trading. Moreover, issues associated with the functions of the National Carbon Projects Assessment Technical Committee were also covered under this aspect.

Furthermore, under the contractual agreements, the focus was on the assessment and review of contractual agreements between parties involved in the carbon trade projects. The audit also looked into the guidance on the involvement of competent staff during the preparation and signing of contractual agreements. Moreover, contract vetting and the inclusion of environmental conservation and sustainable development were assessed.

Regarding the regulation of the implementation of carbon trade projects, the focus was to assess monitoring, evaluation, coordination, and oversight of the implementation of the Carbon Trade activities by VPO. The team also assessed the prioritisation of revenue accrued from carbon trade projects for environmental conservation and sustainable development.

The audit covered the entire country, whereby data was collected from Dodoma and Morogoro regions, where the headquarters of ministries and government entities involved in carbon trade projects are located. Moreover, for physical verification purposes, data were collected from the two regions, namely Manyara and Katavi. These regions were selected as these are the only areas in Tanzania where carbon trade projects have matured to the point of generating carbon credits.

The main study covered three financial years (i.e., 2021/22, 2022/23 and 2023/24). This period was chosen because the National Carbon Trade Regulations and Guidelines were developed in the financial year 2021/22 and revisited in 2023. This allowed the team to assess the status of implementation and the impacts of these legal frameworks on carbon trade in Tanzania and conduct a reasonable analysis, which enabled audit conclusions and recommendations to be drawn.

### 1.3.3 Audit Criteria

To assess the effectiveness of the management of carbon trade, the audit criteria were drawn from different sources such as policies, acts and regulations, guidelines, and plans. These criteria are summarised in **Figure 1.1**. The details of these criteria are presented in **Appendix 5** of this report.

**Figure 1.1: Audit Criteria**

**Development and Dissemination of Baseline Data**

- Regulation 9(1) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) requires VPO to provide key information to proponents.
- Under GN 7303 (2022), the NCMC has been delegated to measure, report and verify baseline data on Greenhouse gases.
- The United Nations Framework Convention on Climate Change (UNFCCC), 1992, states that parties must submit national reports to UNFCCC, including an updated Greenhouse Gas (GHG) inventory.

**Initiation and Planning of the Carbon Trade Activities**

- Para 3.1.1 of the National Carbon Trading Guidelines,2022 outlines that proponents must have expertise, financial capacity, and legal compliance, and conduct environmental and social impact assessments. They must collaborate with the Managing Authority to develop Project Concept Notes and Documents, submitted for review by the VPO.

**Management of Contract Agreements of Carbon Trade**

- Regulation 29 (1) of Environmental Management (Control and Management of Carbon Trading) (Amendment) Regulations, 2023 requires persons intending to collaborate on a carbon trading project to enter into contractual agreements.
- Para 7 of the Office of the Attorney General (Discharge of Duties) (Provision of Legal Opinion by State Attorneys and Law Officers in Public Service) Guidelines, 2022, requires the Head of a Legal Department or unit to assess the nature and complexity of each request for legal opinion and assign it in writing to a state attorney or law officer for his action according to the law.



**Implementation of Carbon Trade**

- Regulation 9(1)(j) and Regulation 19(1)(g) of the Environmental Management (Control and Management of Carbon Trading Mechanism) (Amendment) Regulations, 2023 require VPO to oversee periodic monitoring, evaluation, and reporting on carbon trading projects. The DNA must coordinate these activities and ensure a proper cost-benefit sharing scheme is implemented.
- Para 5 Appendix 1 (k) of the National Carbon Trading Guidelines, 2022, requires VPO to oversee the implementation of the cost and benefit-sharing scheme.

***Source:*** Auditors' Analysis of Criteria Related to Carbon Trade, 2024

### 1.3.4 Sampling Techniques, Methods of Data Collection and Analysis

Various methods for sampling, data collection and analysis were used in the audit, as presented below:

### (a) Sampling Techniques Methods

For verification purposes, purposive sampling was employed to assess the 56 carbon trade projects registered by the NCMC as of September 2024. This included 28 land-based projects in the forestry and agriculture sectors and 18 non-land-based projects in the waste management, energy, and transport sectors.

The sampling criteria were primarily based on the projects that reached maturity (having obtained a letter of no objection and initiated the development of carbon credits) and sectors with many registered carbon trade projects. Through purposive sampling, the audit excluded non-land-based carbon trade projects during physical verification. This is because none of the 18 registered projects in this category had started generating carbon credits at the time of the audit.

Within the land-based projects, the forestry sector had 28 projects, whereby 24 were at the concept note development stage, and four were at the implementation stage. On the other hand, the agriculture sector had only four projects at the concept note development stage. The forest sector was chosen due to its higher number of projects and greater progress in carbon trade project implementation.



#### *Selection of Covered Regions*

Notably, since carbon trade projects are implemented nationwide, the audit team employed a purposive sampling approach to select regions for data collection and site visits, ultimately sampling four (4) regions, as detailed in **Table 1.1.**

**Table 1.1: Selected Regions for the Audit**

| Region | Name of the Project | Factor Contributed to Selection | |
|---|---|---|---|
| | | Ministry or Institution (HQ) | Project after Contract Agreement |
| Dodoma | - | √ | |
| Morogoro | - | √ | |
| Katavi | REDD in Ntakata Mountains | | √ |
| Manyara | REDD in Makame Savannah | | √ |
| | REDD in Yaenda - Eyasi | | √ |

***Source***: Auditors' Analysis of the Registered Carbon Trade Projects Accessed Through the NCMC Website on 8 August 2024

Two main criteria guided the selection of these regions as detailed hereunder;

Firstly, the team covered Dodoma and Morogoro out of the four regions, considering that the regions are the headquarters of the main audited entity and other stakeholders in carbon trading activities. Dodoma hosts the Office of the Vice President (VPO), the Ministry of Natural Resources and Tourism (MNRT), the Tanzania Forest Services Agency (TFS) and the President's Office - Regional Administration and Local Government (PO-RALG). At the same time, Morogoro is the headquarters of the National Carbon Monitoring Centre (NCMC), and all 56 projects were registered there. In these offices, the team undertook the assessment of all 56 registered carbon trade projects as of September 2024.

Secondly, the team sampled Katavi and Manyara, where carbon trade projects were being implemented, and the regions had begun earning income from the investments. This selection allowed the audit team to visit the project areas and evaluate the manner in which the managing authorities, such as Local Government Authorities (LGAs), were undertaking such projects.

**(b) Methods for Data Collection**

Both qualitative and quantitative data were gathered during this audit. This was accomplished by using three different methods: interviews, document reviews and physical verification, as described below.

### *(i) Interviews*

This approach provided insights into the management of land-based carbon trade projects. Interviews enabled the team to gain a broader understanding of the audit areas, identify existing challenges, identify root causes, and assess the consequences of these problems and challenges. **Appendix 3** lists the individuals interviewed and explains the reasons for interviewing them.

### *(ii) Documents Review*

The audit team reviewed various documents to gather relevant information for the audit, focusing on the period from 2021/22 to 2023/24. The documents reviewed included planning documents, performance reports, progress reports, and monitoring and evaluation reports. This review aimed at ensuring that the audit findings were supported by comprehensive evidence and provided the necessary information to draw clear, well-supported conclusions. **Appendix 4** lists the documents reviewed and the reasons for their review.

### *(iii) Physical Verification*



The audit team conducted site visits for verifications in the Katavi and Manyara regions and assessed how the Managing Authorities[7] or Local Government Authorities managed the carbon trade projects in their area of jurisdiction. The main objective of these visits was to evaluate the adequacy and compliance with the implementational or contractual agreements signed after the development of the carbon trade regulations and guidelines in 2022.

During the visits, auditors interviewed various officials, such as the Village Executive Officers (VEOs), who are involved in the management of carbon trade projects. They also visited different villages where carbon trade projects were implemented. The auditors documented their observations by taking notes and capturing photographs as evidence. They also collected all documents that were associated with carbon trading activities.

[7] The Local communities undertaking carbon trade in collaboration with the proponent

### (c) Methods Used for Data Analysis

The data analysis involved examining, categorising, tabulating, and recombining both quantitative and qualitative evidence to address the audit objective, as presented in **Figure 1.2**.

**Figure 1.2: Methods Used for Data Analysis**

**Quantitative Data Analysis**

This analysis involved data on carbon trade revenue, expenditures, project status, staffing, and technical committee meetings. The data was organised and analysed using statistical methods, with the results presented in tables and histograms to offer clear insights into the country's carbon trade activities.

**Qualitative Data Analysis**

The analysis involved reviewing qualitative data on baseline data validation, project documents, impact assessments, and contractual agreements related to carbon trade. Patterns and differences were identified to draw conclusions. Data from interviews and documents were then quantified by counting positive or negative statements and identifying common themes.

***Source:*** Auditors' Analysis of the Methods Used in Data Analysis, 2024

## 1.4 Data Validation Process

The Vice President's Office (VPO) and the National Carbon Monitoring Centre (NCMC) were given an opportunity to review the draft audit report and factually clarify the information presented. This was done to validate the presented information and ensure the validity and accuracy of the report's contents. The management of VPO confirmed the accuracy of the information presented in this report, and their comments and responses are shown in **Appendix 1** of this report.

Similarly, experts in the field of environment, specifically in the management of carbon trading, were given the opportunity to provide their independent opinions and authenticate/validate factual content presented in the report.

## 1.5 Standards Used for the Audit

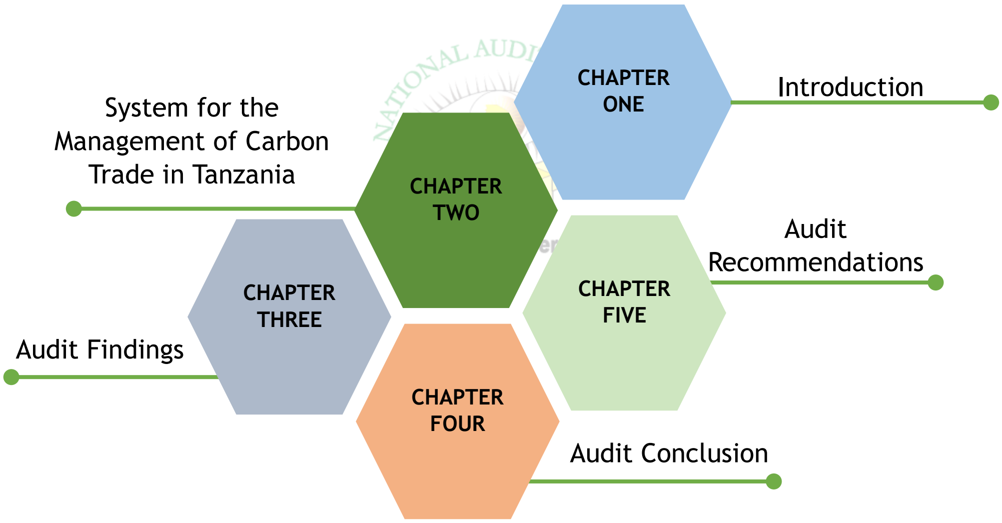
The audit was conducted in accordance with the International Standards of Supreme Audit Institutions (ISSAIs) on Performance Auditing issued by the International Organization of Supreme Audit Institutions (INTOSAI).

These standards require that the audit is planned and performed to obtain sufficient and appropriate evidence to provide a reasonable basis for findings and conclusions based on audit objectives.

## 1.6 Structure of the Audit Report

The main parts of the report are presented in **Figure 1.3**:

**Figure 1.3: Structure of the Audit Report**



## CHAPTER TWO

## SYSTEM FOR THE MANAGEMENT OF CARBON TRADE IN TANZANIA

### 2.1 Introduction

This chapter describes the system that guides carbon trading activities. This includes the legal framework and strategies, key actors and stakeholders, their responsibilities, and resources involved. Additionally, it describes processes used to manage the country's carbon trade.

### 2.2 Governing Policy and Legal Framework

The following are the policies, laws, and regulations that govern the management of carbon trade in the country.

#### 2.2.1 Governing Policies, Acts and Regulations.

**Table 2.1** indicates the policies, acts and regulations that govern the activities of carbon trading in Tanzania.

**Table 2.1: Summary of Governing Policies, Acts and Regulations**

| Category | Name | Content |
|---|---|---|
| Policy | The National Environmental Policy, 2021 | Provides a national framework for guiding harmonised and coordinated environmental management for the strengthened national capacity for addressing climate change impacts. |
| | National Forest Policy, 1998<br>National Energy Policy, 2015<br>National Agriculture Policy, 2013<br>National Land Use Policy, 1997 (Revised Edition 2021) | Provide a national framework for addressing climate change response strategies in each sector of the ministry, such as energy, forestry, agriculture, waste management, transport and industrial processes, and product use. |
| Acts | The Environment Management Act (Act No. 20 of 2004) | It assists in taking measures to address climate change, particularly the impacts of climate change and adaptation |

| Category | Name | Content |
|---|---|---|
| | | measures. It also establishes the principles for sustainable environmental management and empowers the Minister responsible for the environment to issue regulations, such as the Carbon Trading Regulations. |
| | Forest Act, 2002 | Insists on taking measures to address climate change in sector ministries. |
| | Land Act, 1999 and Village Land Act, 1999 | Provide guidelines for land tenure (ownership) and management in Tanzania, a key factor in carbon trading projects, especially for forestry and agricultural initiatives.<br>Village Land Act 1999 helps secure land rights for communities engaged in carbon sequestration projects. |
| | Local Government Acts (District Authorities Act, 1982 & Urban Authorities Act, 1982) | Provide the framework for local governance in Tanzania, thus empowering local authorities to support and manage community-based carbon trading projects. |
| | Energy Act, 2008 | Promotes sustainable energy production and use such as renewable energy initiatives, such as solar, wind, and hydropower, which can generate carbon credits. |
| Regulations | The Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) | Provides control and management of carbon trading in the country. |

***Source:*** Auditors' Analysis of the Legal Framework on Carbon Trade, 2024

**Table 2.2** provides a summary of the guidelines, treaties, and international agreements for carbon trading in Tanzania.

**Table 2.2: Summary of Guidelines, Treaties and International Agreements**

| Category | Name | Content |
|---|---|---|
| Guidelines | The National Carbon Trading Guidelines, 2022 | Provides national procedures and requirements for undertaking carbon trading in Tanzania. |
| Treaties and International Agreements | United Nations Framework Convention on Climate Change (UNFCCC) -1992 | The UNFCCC sets rules and frameworks for transparent and accountable carbon trading systems and mechanisms. It also supports developing countries in building carbon market infrastructure and ensures the integrity of carbon credits. |
| | The Kyoto Protocol (1997) | Sets legally binding emission reduction targets for developed countries. This enabled carbon trading through mechanisms like the Clean Development Mechanism (CDM), Joint Implementation (JI), and International Emissions Trading (IET) to help countries meet emission reduction targets. |
| | The Paris Agreement (2015) | Strengthens global climate action by limiting global temperature rise to below 2°C, aiming for 1.5°C. It enables countries to use carbon trading to meet climate goals through market mechanisms like Article 6. |
| | REDD+ Framework (Reducing Emissions from Deforestation and Forest Degradation) | Aims to combat deforestation and forest degradation in developing countries while fostering conservation, sustainable management, and enhancement of forest carbon stocks, thus Enabling the generation of carbon credits from forest-based projects. |

***Source:*** Auditors' Analysis of the Guidelines, Treaties and International Agreements, 2024

## 2.3 Strategies for Management of Carbon Trade Projects

The strategies related to the management of carbon trading activities in the country are outlined below:

### (a) Tanzania Vision 2025

Tanzania's Development Vision 2025 prioritises environmental sustainability and climate change adaptation. Carbon trading helps achieve these goals by reducing carbon emissions and offering opportunities to earn credits through reforestation and sustainable land management, as well as supporting natural resource management and sustainable agriculture.

### (b) Five-Year Development Plan III

The Third National Five-Year Development Plan aims to achieve the goals of Tanzania's Vision 2025 by addressing climate change through environmental protection and mitigation. It includes carbon trade as a key strategy, promoting sustainable practices such as reforestation, waste management and renewable energy. Carbon markets provide revenue through carbon credits, supporting development while enhancing environmental protection and climate resilience.

### (c) National Environmental Master Plan for Strategic Interventions (2022 – 2032)

The Master Plan's overall objective is to guide coordinated environmental interventions based on regional challenges and solutions. It includes developing and operationalising the National Carbon Trade Guidelines and regulations by 2023, assessing ecosystems and sectors for carbon credits by 2024, developing and implementing programmes to access the carbon credit market through awareness creation and capacity building by 2024, and implementing a gender empowerment program for carbon credits by 2025. The plan also emphasises raising awareness and building capacity on carbon credit procedures, accessibility, and potential buyers by 2025.

### (d) National Climate Change Response Strategy 2021 - 2026

The overall objective of the National Climate Change Response Strategy 2021-2026 is to enhance national resilience to the adverse impacts of climate change and enable the country to pursue low-emission development pathways to achieve sustainable development. This includes leveraging carbon trade to reduce emissions and generate revenue through carbon credits, supporting climate change mitigation and adaptation efforts.

### (e) Tanzania National Determined Contribution (NDC)

The Tanzania National Determined Contribution (NDC) of July 2021 provides a set of interventions on adaptation and mitigation, which are expected to build the country's resilience to the impacts of climate change and contribute to the global effort of reducing greenhouse gas (GHG) emissions. Tanzania will reduce greenhouse gas emissions economy-wide by 30% to 35%, relative to the Business-As-Usual (BAU) scenario, by 2030. This target is expected to reduce about 138-153 Million tons of Carbon dioxide depending on the baseline efficiency improvements, consistent with its sustainable development agenda.

### (f) VPO's Medium Term Strategic Plan (2021/22 - 2025/26)

This strategy aims to enhance environmental conservation, pollution control, climate resilience, and the coordination of environmental management efforts. This is achieved by reducing carbon emissions from 30% to 20%, a target supported through various measures, including implementing carbon trading activities. The latter plays a crucial role in helping the country meet these emission reduction targets by providing a financial incentive for projects that reduce greenhouse gas emissions, such as reforestation, renewable energy initiatives and energy efficiency improvements.



## 2.4 Key Actors, Stakeholders and their Relationship in the Management of Carbon Trade in Tanzania

This section profiles the key actors and stakeholders and their relationships in managing carbon trade in the country. The names, roles and summarised functional relationships of the key actors and stakeholders engaged in the management of carbon trade in the country are provided in **Figure 2.2.**

**Figure 2.2: Roles and Responsibilities of Key Actors**

**Vice President's Office**

The VPO works to provide policy guidance on carbon trading and other crediting mechanism that promote investment, social, cultural, economic and environmental justice. VPO is also responsible to coordinate and conduct monitoring and evaluation of the registered carbon trading projects in the country.

**National Carbon Monitoring Centre (NCMC)**

(a) Coordinates function of the National Carbon Projects Assessment Technical Committee;
(b) Registers Carbon Trading Projects under compliance and voluntary mechanisms;
(c) Measures, Reports and Verifies Greenhouse Gases; and
(d) Keeps a register of all carbon projects in the country.

***Source:*** Auditors' Analysis of the Roles and Responsibilities of Key Actors involved in Carbon Trade, 2024

**Figure 2.3** provides the roles and responsibilities of other stakeholders in the country's carbon trade.

**Figure 2.3: Roles and Responsibilities of Other Stakeholders**

**Sector Ministries**

Provide sectoral technical, administrative and legal advice on carbon trading project

**PO-RALG**

Oversees and coordinates implementation of policies and guidelines related to carbon trading projects

**Private Sectors, Development Partners and Civil Society Organizations**

Planning, preparing and implementing carbon projects or programs

**Regional Secretariats**

To oversee and coordinate carbon trading projects in the areas of their jurisdiction

**Village Government**

Preparing, signing and supervising the implementation of contracts related to carbon trading project in consultation with the respective councils

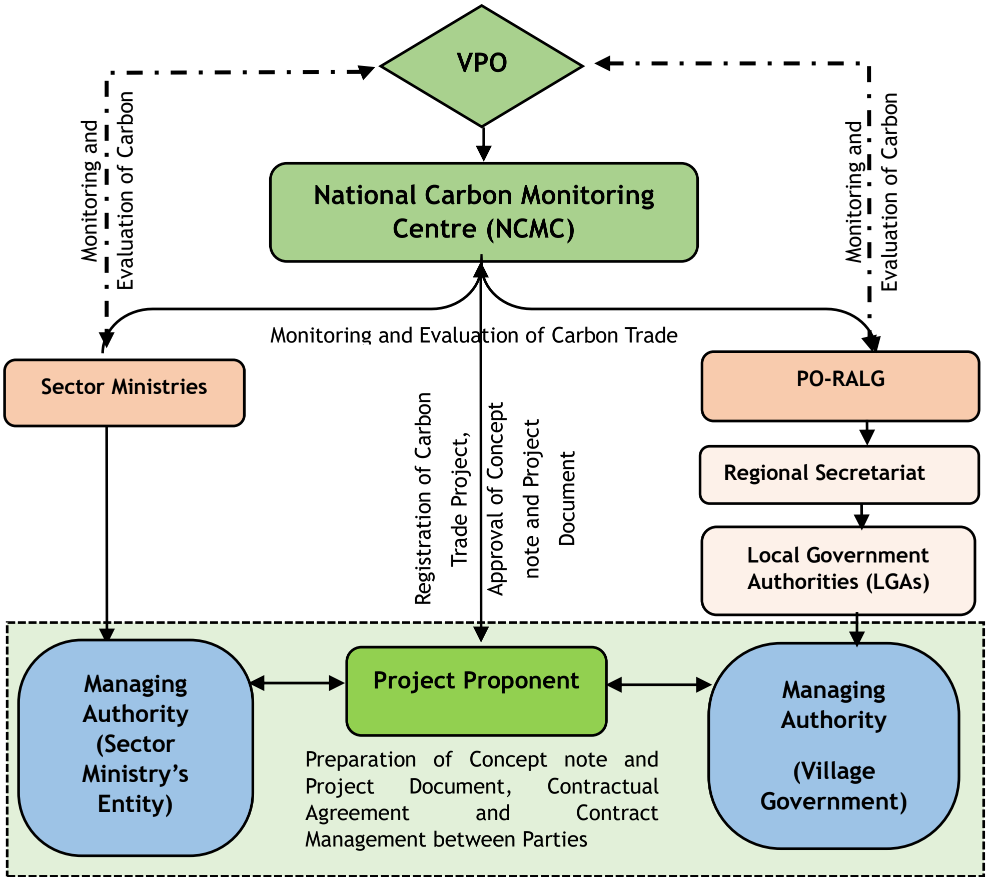
**Local Government Authorities (LGAs)**

Overseeing carbon trading projects at their areas of jurisdiction, in consultation with their respective regional secretariats

***Source:*** Auditors' Analysis of the Roles and Responsibilities of Other Stakeholders involved in Carbon Trade, 2024

**Figure 2.4** provides the relationship and key activities among the key actors and stakeholders involved in the management of the carbon trade in the country.

**Figure 2.4: Relationships among the Key Actors and Stakeholders involved in the Management of Carbon Trade in the country**




*Source:* Auditors' Analysis of the Key Actors and Stakeholders involved in Carbon Trade, 2024

## 2.5 Resources for the Management of Carbon Trade in the Country

### 2.5.1 Financial Resources

**Table 2.3** indicates the fund allocation and disbursed from 2020/21 to 2023/24 by the VPO for the Management of Carbon Trade.

**Table 2.3: Funds Allocation for the Management of Carbon Trade by the VPO**

| Financial Year | Activity | Allocated Amount (TZS) | Disbursed Amount (TZS) | Percentage of Disbursed Amount |
|---|---|---|---|---|
| 2022/23 | Five Regulations on Environment Management are to be in place by June 2026, when the Carbon Trade Regulation was prepared and Gazetted. | 75,850,000 | 26,165,016 | 35 |
| | Two Guidelines on Environmental Management were prepared. Whereby Control and Management of Carbon Trade was prepared | 398,390,000 | 240,027,441.4 | 60 |
| 2023/24 | Disseminate and monitor the implementation of Environmental Management (Control and Management of Carbon Trading Regulations) | 23,100,000 | 0 | 0 |
| | To assess Carbon Trade Investment Opportunities in Mangrove Forestry Resources by June 2024 | 64,730,018 | 0 | 0 |
| **TOTAL** | | **562,070,018** | **266,192,457** | 47 |

***Source:*** Auditors' Analysis of information extracted from the Vice President's Office Medium Term Expenditure Framework (MTEF) for The Financial Year 2023/24 – 2025/26

**Table 2.3** shows that the budget allocation was only provided to the Vice President's Office (VPO), while the National Carbon Monitoring Centre

(NCMC) did not receive any direct funding from the VPO despite the fact that the VPO was obliged to handle all financials matters for NCMC. However, starting from 2024/2025, the NCMC Plan and budget were approved by the VPO after being requested, but it was not included in the final VPO's budget for the same financial year.

### 2.5.2 Human Resources

A summary of the human resources available to manage this activity is provided in **Tables 2.4** and **2.5**.

**Table 2.4: Status of Human Resources for the Implementation of Climate Change Adaptation Actions at VPO**

| Designation | Required Number | Available Number | Deficit |
|---|---|---|---|
| Director of Environment | 1 | 1 | 0 |
| Assistant Directors | 3 | 3 | 0 |
| Environmental Officers | 18 | 10 | 8 |
| Town Planners | 5 | 4 | 1 |
| Fisheries Officers | 3 | 2 | 1 |
| Livestock Officers | 1 | 1 | 0 |
| Engineers | 7 | 4 | 3 |
| Agricultural Officers | 2 | 2 | 0 |
| Economists | 2 | 2 | 0 |
| Forest Officers | 5 | 4 | 1 |
| Game Officers | 1 | 1 | 0 |
| Community Development Officers | 2 | 1 | 1 |
| Teachers | 6 | 4 | 2 |
| **Total** | **56** | **39** | **17** |

***Source***: Auditors' Analysis of Information (IKAMA) from the VPO, 2024

**Table 2.4** indicates that the Vice President's Office (VPO) was understaffed in seven designations out of the total 13 designations. The designation which was mostly understaffed was that of the environmental officers, with a shortage of 8 staff. Moreover, the overall shortage of staff members at VPO was 17. That means the staff deficit is 31% of the total required staff for VPO to effectively implement climate change adaptation actions.

**Table 2.5: Status of Human Resources for the Management of Carbon Trade at NCMC**

| Entity | Designation | Available Number |
|---|---|---|
| NCMC | Coordinator | 1 |
| | Safeguard Information System Officer | 1 |
| | Biodiversity Conservationist | 1 |
| Total | | 3 |

***Source:*** Auditors' Analysis of Information from VPO and NCMC 2023/24, (2024)

**Table 2.5** indicates that NCMC is currently staffed by three part-time staff members who are working for NCMC in their secondary roles. Based on the proposed structure, for the NCMC to effectively carry out its responsibilities, it requires 45 permanent staff with expertise in diverse fields, including Surveying, Administration, IT, Finance, Research, Procurement, and Law.

However, the staff mentioned in **Table 2.5** are responsible for the registration, coordination, and monitoring of carbon trading activities.

## 2.6 Process for the Management of Carbon Trade in Tanzania

The management of the carbon trade involves five key stages, and each stage entails specific activities, as explained in **Figure 2.5**.

## Figure 2.5: Process for the Management of Carbon Trade in Tanzania

### 1. Development of Baseline Data

The primary function of the NCMC, as outlined in the delegation of powers by the Minister responsible for Environment, issued in 2022 is to measure, report and verify GHG emissions. The NCMC is also mandated to coordinate national GHG inventory and national forest inventories. This role involves collecting and validating baseline data (baseline scenario) to establish a reliable reference point for measuring carbon stock. The NCMC is then responsible for reporting on GHG inventories on an annual basis.

### 2. Engagement of the Proponent

This stage involves registration of the proponent's project idea by VPO through NCMC within 30 days after application . Among other issues, VPO checks whether managing authorities verified the proponent's expertise in carbon trading activities. At this stage, the managing authority is also obliged to check the registration status of the proponent with relevant authorities, possession of relevant expertise on carbon trading, adherence to all applicable legal requirements in operating carbon trading and evaluating financial capacity.

### 3. Initiation and Planning of Carbon Trade Activities

At this stage, the VPO, through the National Carbon Projects Assessment Technical Committee, is responsible for reviewing and scrutinizing the concept note and consent letter (whether an MoU or extract minutes) prepared by the managing authority in collaboration with the proponent. The VPO must also ensure that the application fees are paid in accordance with the regulations.

### 4. Contractual Agreement between Parties

At this stage, VPO through the sector ministries is obliged to regulate the initial evaluation of contract terms and conditions, negotiation to amend and agree on terms, drafting and reviewing the contract for accuracy and compliance, obtaining approvals from the management and legal advisors and finally signing the contract.

### 5. Implementation of Carbon Trade Activities

This stage involves the implementation of the contract between the managing authority and the proponent. Key activities include managing time (monitoring commencement date, project duration, and completion date), evaluating cost (payment methods and cost payments), assessing the realization of intended benefits, verifying that the project scope was maintained, and ensuring quality standards are met. The VPO is there to regulate the projects registered for carbon trading.

***Source:*** Auditors' Analysis of the National Carbon Trading Guidelines, 2022

# CHAPTER THREE

# AUDIT FINDINGS

## 3.1 Introduction

This chapter presents the findings on the effectiveness of the Vice President's Office in managing carbon trade to reduce greenhouse gas emissions and stimulate economic growth through revenue generated from the sale of carbon credits. The findings cover the extent of trading, development, and dissemination of information, as well as baseline data, initiation, and planning. Moreover, issues related to the guidance over the management of contractual agreements and the implementation of these activities are also discussed. The details of the findings are explained hereunder:

## 3.2 Extent of Carbon Trading

The National Carbon Trading Guidelines, 2022, indicated that Tanzania has enormous potential to engage in carbon trading projects, such as the use of clean energy sources for transportation and power generation, methane recovery in wastewater treatment, Reducing Emissions from Deforestation and Forest Degradation (REDD) and Industrial waste management practices.

The guidelines further provide a roadmap for tapping opportunities associated with carbon trading in line with the United Nations Framework Convention on Climate Change, Kyoto Protocol, the Paris Agreement and voluntary carbon crediting mechanisms. These include the requirements and procedures for carbon trading, costs and benefits sharing, and institutional arrangements for carbon trading.

The extent of carbon trading was assessed by examining the alignment of the regulatory framework with international agreements, participation in regional and global carbon markets, utilisation of carbon trading potentials, progress in implementing carbon trade projects, and the level of involvement from the public and private sectors. Detailed observations of these aspects are provided in the following sub-sections.

### 3.2.1 Inadequate Alignment of Regulatory Framework with International Agreements

The review of the policies, laws, and regulations governing carbon trade revealed inadequate alignment of the country's regulatory framework with international agreements. This is despite the fact that Tanzania has committed to climate action through the domestication of international agreements like the Paris Agreement. However, the audit noted shortfalls in existing regulatory frameworks, as highlighted in **Table 3.1.** This was reflected by the fact that the policy and legal framework were not regularly reviewed and updated to take into account emerging potentials and opportunities to fully harness and exploit carbon trade. This is against Article 4 (2, e (ii)) of the UNFCCC, 1992, which requires the parties to identify and periodically review their own policies and practices which encourage activities that lead to greater levels of anthropogenic emissions of greenhouse gases.

**Table 3.1: Challenges for Alignment of Regulatory Framework with International Agreements**

| S/N | Name of the Regulatory Framework | Challenges |
|---|---|---|
| 1. | National Environmental Policy, 2021 | The lack of a comprehensive climate change policy, reliance on sectoral policies and the provisions of general environmental policies results in the most significant barrier to addressing GHG emission issues, including carbon trade. |
| 2. | The Environmental Management Act, 2004 | Despite having provisions (e.g. 75) for measures on climate change, the act has not been updated to cover the aspects of carbon trading. |
| 3. | The Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) | Does not highlight the cooperative carbon trading approaches to facilitate carbon trading with other countries or companies. |
| 4. | National Carbon Trading Guidelines, 2022 | The guidelines are out of date as they were published in 2022, while their respective regulations were amended in 2023. Also, the guidelines do not address cost-benefit sharing for non-land-based carbon trade projects, as they do not establish a clear framework for conducting negotiations. However, in 2023, the VPO began reviewing the guidelines, but they had not yet been approved as of this audit. |

***Source:*** Auditors' Analysis of the Respective Policy, Acts and Regulations, 2024

**Table 3.1** highlights some key aspects of Tanzania's policies, laws, and regulations that could be improved to harness emerging climate opportunities, including carbon trade.

Moreover, the country has yet to fully implement mechanisms to facilitate cooperative carbon trading approaches under Article 6 of the Paris Agreement, which would allow for international carbon credit exchanges. The response from VPO revealed that this was done to await the completion of negotiations and arrangements on the modalities and procedures for Articles 6.2 and 6.4 under COP29, which were finalised at the end of 2024.

In addition, the National Carbon Trading Guidelines, 2022, have a narrow focus on non-land-based projects. This is contrary to Articles 17 and 6(2) of the Kyoto Protocol, which underscore the importance of clear frameworks for ensuring effective and transparent carbon trading. However, the VPO has undertaken some initiatives, including updating and reviewing the National Carbon Trading Guidelines, 2022 (though yet to be approved), to include the cooperative carbon trading approaches under Article 6 of the Paris Agreement.

Inadequate alignment limits the country's ability to effectively participate in international carbon markets. Furthermore, these gaps have resulted in the slow implementation of carbon trading initiatives, preventing Tanzania from fully leveraging its carbon trading potential. Moreover, it limits Tanzania's ability to tap into the global carbon market, reducing both the environmental and economic benefits that could be achieved through carbon credit generation.

Furthermore, **Table 3.2** outlines the identified gaps in the existing guidelines for carbon trade.

**Table 3.2: Extent of Availability of Guidance on Cooperative Approaches on Carbon Trade**

| Aspect of the Guidelines | Status of Coverage |
|---|---|
| Cooperative Approach to Carbon Trade between Country and Country | × |
| Cooperative Approach on Carbon Trade between Country and Companies | × |
| Voluntary Carbon Trade | ✓ |
| Implementing Article 6.4 of the Paris Agreement on establishing a new international carbon crediting mechanism | × |
| Measuring, Reporting and Verification for emissions trading | × |

***Source:*** Auditors' Analysis of the respective National Carbon Trading Guidelines, 2024

**Key:**

✓ Covered
× Not Covered

**Table 3.2** indicates that Tanzania has not developed guidelines essential for promoting carbon trade. The existing guidelines do not address issues associated with cooperative approaches, Measuring, Reporting and Verification of carbon credits.

The guidelines missed aspects of cooperative approaches, which are vital for enabling carbon trading between Tanzania and other countries or private companies and facilitating cross-border carbon credit exchanges that could significantly enhance Tanzania's participation in the global carbon market. However, the VPO had initiated efforts to update and review the National Carbon Trading Guidelines, 2022, (though not yet approved) to incorporate cooperative carbon trading approaches under Article 6 of the Paris Agreement, but they had not yet been approved as of this audit.

Furthermore, there was a lack of aspect for the Monitoring, Verification and Reporting (MRV) of carbon credits in the guidelines. Therefore, the country relied on international standard-bearers such as Verra Standard on Measuring, Reporting and Verification. Based on the lack of MRV aspects in the existing guidelines, the correctness of the results from these international standard-bearers was not confirmed by local entities such as VPO. This was evident from the fact that the information on carbon credits reported by internationally accredited entities in the three visited carbon trade projects, Ntakata Mountains, Makame Savannah, and Yaeda-Eyasi in Tanganyika DC, Kiteto DC, and Mbulu DC respectively, were not confirmed by VPO.

### 3.2.2 Limited Participation in the Regional and International Carbon Market

Tanzania's participation in the regional and international carbon markets was noted to be limited, which significantly restricts its potential to capitalise on the environmental and economic benefits offered by carbon trading. While the country has made some progress in developing a national carbon trading framework, it has yet to fully engage in the broader global carbon market. This limited participation stems from several factors, including inadequate trading of carbon credits into the global market and the absence of cooperative agreements with other countries or companies. This was due to the fact that carbon trading is a new concept for many countries, including Tanzania, and they are still in the learning phase.

The details are presented hereunder:

### *(a) Small Volume of Carbon Credits Traded in the Global Market*

The review of the World Bank Group Statistics (2023)[8] on global carbon credit issuance and the Africa Carbon Markets Initiative (ACMI) Overview, 2023 revealed that Tanzania traded the smallest volume of carbon credits in the global market compared to other countries, as shown in **Figures 3.1** and **3.2**.

The traded carbon credits were lower than the country's annual projections of over 40Mt$CO_2$ per year[9]. As a result, the country has not fully realised its potential to contribute to the global carbon market, thereby limiting the environmental and economic benefits that could have been gained from carbon trading.

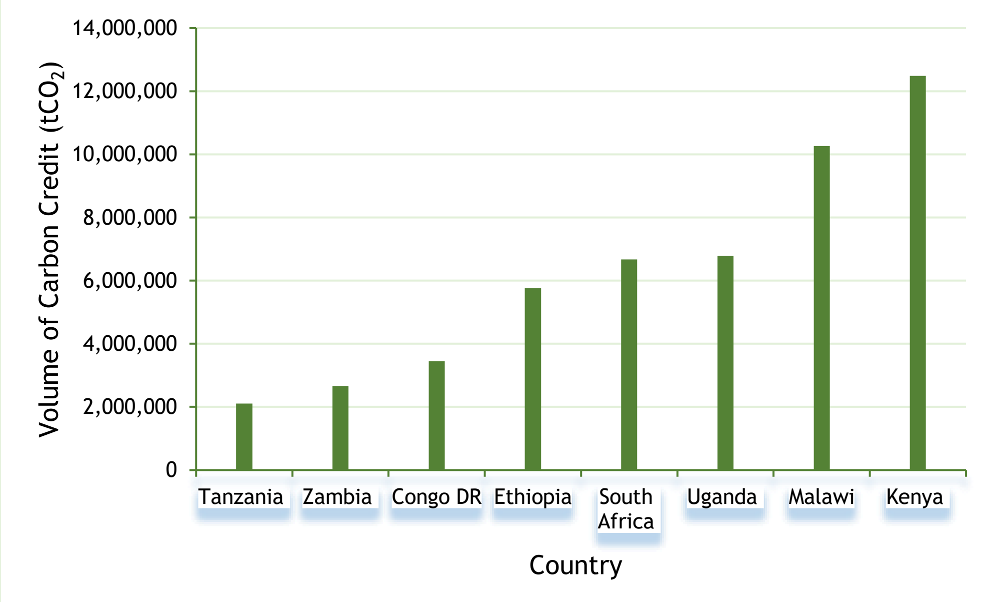
This was attributed to factors such as slow project implementation and limited investment in carbon trading initiatives. This was further caused by the lack of a fully-fledged institution with the mandate to manage the carbon trade in Tanzania. The current Carbon Monitoring Centre – NCMC lacks a clear line of command with VPO.



[8] https://carbonpricingdashboard.worldbank.org/credits/issuance

[9] Taarifa ya Fursa za Biashara ya Kaboni kwenye Hifadhi za Misitu na Hifadhi na Wanyamapori Nchini, TFS, 2024

**Figure 3.1: Carbon Credits Issued by Various African Countries to the Global Market**

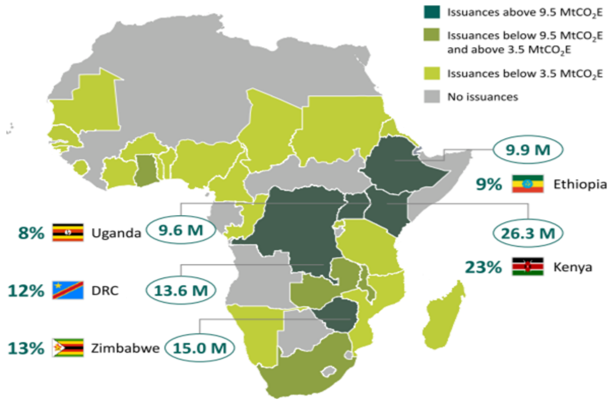



***Source:*** Auditors' Analysis of Word Bank Statistics on the Issued Carbon Credits, 2024

**Figure 3.1** indicates that, out of the eight African countries, Tanzania had traded the smallest carbon credits in the global market, with only 2.1 $MtCO_2$ issued.



**Figure 3.2: African Carbon Credits Records to the World's Carbon Market**




***Source:*** Africa Carbon Markets Initiative (ACMI) Overview, 2023

**Figure 3.2** indicates that the issuance of carbon credits from Tanzania to the global market was below 3.5Mt$CO_2$. This amount underscores the country's limited involvement in the global carbon market, particularly when compared to other African nations like Kenya, Uganda, Congo DR and Zimbabwe, which have issued significantly higher volumes. This happened due to the reason that Tanzania has not yet officially registered or joined the Africa Carbon Markets Initiative (ACMI). Consequently, such a situation has led to Tanzania to lack proper reporting on the issued carbon credits.

***(b) Absence of Cooperative Agreements with Other Countries or Companies***

The review of the State and Trends of Carbon Pricing report by the World Bank Group[10], 2024, highlighted that Tanzania has not yet entered into any agreements to participate as a seller of carbon credits in the international carbon markets. This is contrary to Article 6.2 of the Paris Agreement, which emphasises cooperative approaches involving voluntary cooperation between countries to achieve their Nationally Determined Contributions (NDCs). It allows countries to collaborate by transferring carbon credits or other emission reductions from one country to another.

However, some African countries had entered into cooperative agreements, as indicated in **Table 3.3.** These countries participated as sellers in the Global Carbon Market.

**Table 3.3: Signed Cooperative Approaches by African Countries as Sellers in the Global Carbon Market**

| S/N | Name of the Country | Number of Agreements Signed |
|---|---|---|
| 1 | Tanzania | 0 |
| 2 | Gabon | 1 |
| 3 | Malawi | 1 |
| 4 | Kenya | 2 |
| 5 | Rwanda | 2 |
| 6 | Ghana | 3 |
| 7 | Morocco | 3 |
| 8 | Senegal | 3 |

***Source:*** Auditors' Analysis of the Information on Signed Cooperative Approaches by African Countries, 2024

[10] https://carbonpricingdashboard.worldbank.org/credits/cooperative-approaches

Unlike other countries, **Table 3.3** shows that Tanzania had not signed any agreements to engage in cooperative carbon trading approaches as recommended under Article 6.2 of the Paris Agreement. However, discussions with VPO officials revealed that this was done to await the completion of negotiations and arrangements on the modalities and procedures for Articles 6.2 and 6.4 under COP29, which were finalised at the end of 2024.

The absence of such agreements in Tanzania highlights a missed opportunity to participate in international carbon trading, which could have provided additional financial resources and enhanced the country's ability to meet its climate goals. These cooperative agreements entered by some African countries, such as Gabon, Malawi, Kenya, Rwanda, Ghana, Morocco and Senegal, have substantially strengthened their carbon trading activities.

### 3.2.3 Underutilisation of Carbon Trading Potentials

The audit noted the underutilisation of carbon trading potential, particularly due to insufficient investment in the forestry sector. Furthermore, there were underutilising carbon trade opportunities in other potential sectors than forestry. These shortcomings collectively resulted in inadequate revenue generation from carbon trading potentials. The detailed findings are outlined as follows:

***(a) Insufficient Investment in Carbon Trading within the Forestry Sector***

The Tanzania Forest Reference Emission Level submission to the UNFCCC in 2017 highlights the underutilisation of forests, covering approximately 55% of the total area of mainland Tanzania, which is 48.1 million hectares. This vast forest area presents a significant opportunity for carbon trading, thus reducing emissions while generating revenue and supporting sustainable development. However, the audit noted insufficient investment in carbon trading within the forestry sector, as detailed in **Table 3.4**.

**Table 3.4: Status of Investment in Carbon Trading within the Forestry Sector**

| Aspect | Coverage (Ha) | % Coverage |
|---|---|---|
| Total Forest Area | 48,100,000 | 100 |
| Conserved Forest and Potential for Carbon Trade | 26,236,030 | 55 |
| Total Forest Invested in Carbon Trade | 19,742,011 | 73 |
| Forest Generating Revenue from Carbon Trade | 690,527 | 3 |

***Source:*** Auditors' Analysis of Information from the Tanzania Forest Reference Emission Level, 2024

**Table 3.4** shows that 55% of the total forest cover was successfully conserved, with 73% of these conserved forests invested for carbon trading initiatives. However, only 3% of the conserved forest resources had begun generating carbon credits. This highlights a 97% gap between the potential of carbon trading in the forestry sector and its implementation, indicating that many forestry areas had inadequately activated carbon credit generation.

***(b) Underutilizing Carbon Trade Opportunities in Other Potential Sectors than Forestry***

The analysis of the registered carbon projects across potential sectors revealed limited coverage in agriculture, waste management, livestock, transport, and industrial processes and product use sectors, as shown in **Table 3.5.** This is in contrast to Para 2.0 of the National Carbon Trading Guidelines, 2022, which emphasises the coverage of the potential sectors for carbon trading, including energy, forestry, livestock, transport, waste management, agriculture, industrial processes and product use.

Table 3.5: Registered Carbon Projects across the Potential Sectors

| Priority Sector | Number of Registered Projects | % Registered |
|---|---|---|
| Forestry | 31 | 55 |
| Energy | 18 | 32 |
| Agriculture | 4 | 7 |
| Waste Management | 2 | 4 |
| Livestock | 1 | 2 |
| Transport | 0 | 0 |
| Industrial Processes and Product Use | 0 | 0 |
| **Total** | **56** | **100** |

***Source:*** Auditors' Analysis of NCMC's Register for Carbon Trade Projects, 2024

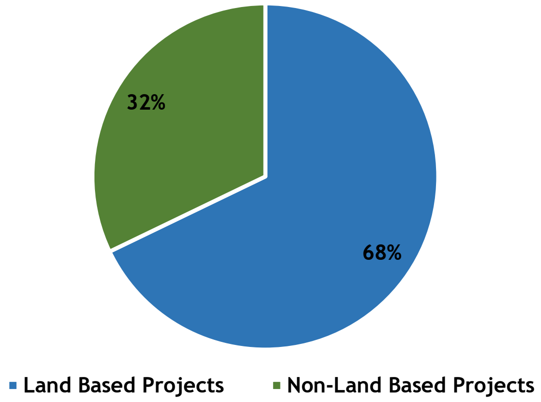
**Table 3.5** indicates that 87% of the registered carbon trade projects are concentrated in the forestry and energy sectors, with forestry accounting for 55% and energy for 32%. In contrast, the coverage of other sectors was relatively lower, with only 13% of projects distributed across agriculture (7%), waste management (4%), and livestock (2%). The table further highlights that no carbon trade projects have been registered in the transport or industrial processes and product use sectors.

This uneven distribution points to underinvestment and underutilisation of carbon trading opportunities in these critical sectors, limiting the overall impact of the carbon trade projects.

### *(c) Limited Investment in Non-Land Carbon Trade Projects*

Moreover, the review of the Carbon Trade Registry prepared by the National Carbon Monitoring Centre (NCMC) in 2024 revealed that non-land-based carbon trade potentials were underutilized for developing carbon trading projects compared to land-based projects, as shown in **Figure 3.3**.

**Figure 3.3: Investment of Land-Based and Non-Land-Based Carbon Trade Projects**




***Source:*** Auditors' Analysis of NCMC Carbon Trade Registry, 2024

**Figure 3.3** shows that 68% of the registered carbon trade projects were land-based, focusing on agriculture, forestry, and livestock, while 32% were non-land-based, covering the energy and waste management sectors. This indicates a prioritization of land-based projects, potentially narrowing the scope of carbon trading opportunities. This trend reflects the influence of market-driven forces and other contributing factors inherent in carbon trade as a market-based incentive mechanism.

By focusing primarily on land-based sectors, there is an underutilization of the diverse potential that non-land-based sectors, such as energy and waste management, could offer to reduce carbon emissions and generate revenue through carbon credits.

Limited investment in non-land-based carbon trade projects was attributed to their higher initial capital requirements compared to land-based initiatives, particularly during the initiation and registration phases. According to the National Carbon Trading Guidelines (2022), non-land-based projects, such as those in energy and waste management, often require advanced infrastructure, sophisticated technology, and long-term financial commitments. These factors have led to a preference for land-based projects, which generally involve lower initial costs and simpler implementation.

*(d) The National Strategic Projects were not Prepared to Generate Carbon Credits*

The audit team reviewed the Nationally Determined Contributions (NDC) and interviewed officials of VPO and NCMC. It noted that the national strategic projects, including the Bus Rapid Transit (BRT), Standard Gauge Railway (SGR), and the Mwalimu Nyerere Hydroelectric Power Project, were not structured to take advantage of carbon trading opportunities. Instead, these projects were primarily utilized to meet Tanzania's Nationally Determined Contribution (NDC) commitments rather than being part of broader carbon trading efforts.

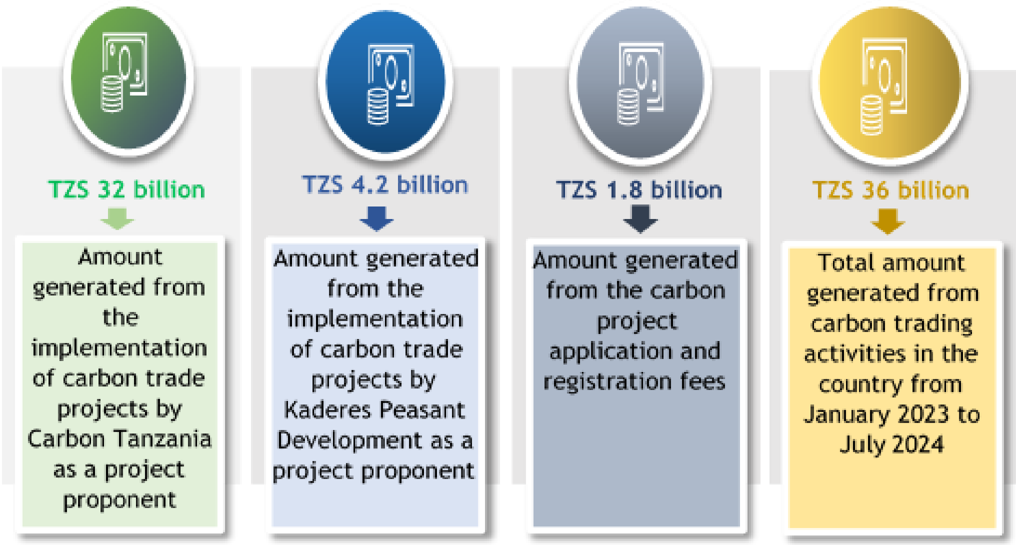
This oversight highlights a missed opportunity to integrate climate finance mechanisms, such as carbon credits, into these large-scale projects, which could support Tanzania's greenhouse gas emission goals while generating revenue as a result of inadequate awareness. This situation contrasts Paras 2.1 and 2.2 of the National Carbon Trading Guidelines, 2022, which explicitly require prioritising clean energy sources for transportation and power generation as potential areas for carbon trade projects within the energy sector.

However, interviews with the VPO officials revealed some efforts and steps to have been taken, including creating awareness so that such projects and similar initiatives could be restructured or adapted to better capitalize on the global carbon credit market now and soon.

Overall, the underutilization of carbon trading potential has led to insufficient revenue generation from carbon trade. The report on carbon trade prepared by NCMC in 2024 approximated a potential annual revenue of TZS 1.26 trillion from carbon trade. However, a review of the same report showed that between January 2023 and July 2024, 51 carbon trade projects were at various stages of development. During this period, only TZS 36 billion was collected through project implementation, fees, and registration, which accounts for just 3% of the projected total revenue.

**Figure 3.4** provides a breakdown of the total amount collected from the carbon trade.

**Figure 3.4: Amount Collected from the Carbon Trade**




***Source:*** Auditors' Analysis of Carbon Trade Report, 2024



### 3.2.4 Gradual Implementation of Carbon Trade Projects

The National Carbon Trading Guidelines, 2022, outline the procedures for implementing carbon trade projects. However, it was noted that the indicative period in which the registered project could remain viable or active in the NCMC registry was almost four years from the date of registration. Further details of this situation are presented in **Table 3.6.**

**Table 3.6: Time Allocation for the Implementation of Carbon Trade Projects in Tanzania**

| Stage | The Maximum Time Allocated for Each Step (Days) | Recommended Maximum Time for Review and Approval (Days) | Total |
|---|---|---|---|
| Registration | 0 | 30 | 30 |
| Project Concept Note Development | 90 | 30 | 120 |
| Project Document Development | 365 | 30 | 395 |
| Commencement | 730 | 0 | 730 |
| **Total** | **1185** | **90** | **1275** |

***Source:*** Auditors' Analysis of Information from the National Carbon Trading Guidelines, 2022

**Table 3.6** shows that the carbon trade project development process in the country required a maximum of 1,185 days. Notably, over half of this time was set as maximum days for the initial stages, from registration to concept note development, before implementation of activities could commence. Additionally, the review and approval stages were given a maximum of 90 days, during which the project is evaluated by the VPO to ensure it meets the requirements.

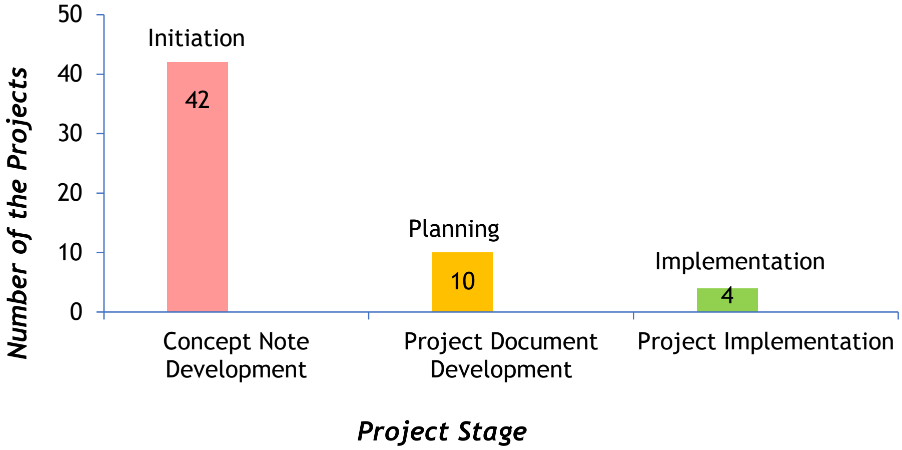
These extended timeframes highlight a lengthy process that could impede the timely execution and effectiveness of carbon trade projects. However, the response from VPO revealed that the maximum number of days allocated to each stage did not necessarily mean that each stage of the project should spend all those days before it was allowed to proceed to the next stage. Some projects might be executed within the shortest period possible at each step.

It was further noted that there were insufficient carbon trade projects implemented. This was evident from the fact that from January 2023 to September 2024, only four (4) registered projects by VPO (representing 7%) were in the implementation phase out of the 56 total registered projects[11]. The remaining 52 registered projects were still in the initiation and planning phase, focusing on concept note preparation and the preparation of project

[11] Carbon Trade Projects Register accessed through https://www.ncmc.sua.ac.tz/application-of-projects

documents. The detailed number of projects and their stages are indicated in **Figure 3.5.**

**Figure 3.5: Status of Implementation of the Registered Carbon Trade Projects**




***Source:*** Auditors' Analysis of NCMC's Carbon Trade Projects Register, 2024

**Figure 3.5** illustrates that most projects were still in the initiation and planning stages, primarily focused on concept note preparation and development of project documents. Moreover, the four projects under implementation were registered before the Guidelines of 2022 and Regulations (amendments) 2023 came into force. It was also noted that as of December 2024, the VPO facilitated the issuance of endorsement letters for six projects in the planning and initiation stages. Moreover, four projects received no objection letters in the same phase. Thus, making a total of ten projects, equivalent to 18% of the total registered carbon trade projects by NCMC.

The limited number of projects at the implementation stage suggested that many opportunities for generating carbon credits and fostering sustainable development were at risk of being delayed. However, the interview with VPO officials revealed that the initiation and planning stages acted as facilitative and guiding phases, ensuring that resources were not wasted or invested in a project that was ineligible for carbon trade in the country.

### 3.2.5 Inadequate Public and Private Sector Engagement in Carbon Trade

The audit noted insufficient engagement from both the public and private sectors in carbon trading. While all registered projects for carbon trade were privately owned, the majority of these projects were led by foreign proponents rather than local stakeholders, as indicated in **Table 3.7.** This was contrary to para 5 of the National Carbon Trading Guidelines, 2022, which requires the implementation of carbon trade to involve the participation and cooperation of various stakeholders at local, national and international levels, ranging from government, private sector and non-state actors.

**Table 3.7: Public and Private Sector Engagement in Carbon Trade**

| Type of Project | Category of Proponents | Number of Proponents | Percentage |
|---|---|---|---|
| Private-Led-Projects | Foreign Proponents | 47 | 84 |
| | Local Proponents | 9 | 16 |
| Public-Led-Projects | Public Proponents | 0 | 0 |
| **Total** | | **56** | **100** |

***Source***: Auditors' Analysis of Information from the Carbon Trade Registry by NCMC, 2024

**Table 3.7** reveals that only 16% of the project proponents were local, with the remaining 84% being foreign entities. Also, **Table 3.7** highlights that none of the project proponents were from the public sector, indicating an absence of public sector ownership in the carbon trade projects. For example, all three carbon trade projects visited in Tanganyika DC, Kiteto DC, and Mbulu DC during this audit were owned by Carbon Tanzania Limited, a privately owned company.

This was attributed to the fact that carbon trade is primarily driven by developed countries (polluters), which often assist developing countries in implementing climate change mitigation measures, including engaging in carbon trading. Moreover, based on the response from VPO, the engagement in carbon trade by local proponents is a long process that requires time and resources to build, given the nature and diversity of the communities in the country.

Inadequate engagement by both local and public sector entities may limit the potential for widespread, sustainable development and economic benefits from these projects at the local level.

The observation above resulted from:

### *(i) High Initial Investment Cost in a Carbon Trade Project*

Para 4.2.1.2 of the National Carbon Trading Guidelines, 2022, indicates that there was a limited engagement in carbon trade because their initial investment cost was high. Moreover, the audit team reviewed the NDC and interviewed officials from VPO, NCMC, NMRT, and TFS. They noted that carbon trade projects are capital-intensive and take a long time to mature. This hinders the rate of investment by various stakeholders at local, national and international levels.

### *(ii) Limited Awareness among Stakeholders*

The review of the National Climate Change Response Strategy 2021-2026 revealed that, there was limited knowledge and skills in the country in areas related to climate change science, particularly carbon trading across governance scales and stakeholders. This was attributed to a lack of awareness and formal or nonformal training programs for the Tanzanian community, especially those involved in the Carbon trade ecosystem/value chain (i.e., the supply side, which is managing authorities and regulators/decision makers). Moreover, most carbon trade at the sector and local level is coordinated by staff who do not have formal training or awareness of carbon trade[12].

The VPO has, however, undertaken several initiatives, including the development of Public Awareness Campaigns on Environmental Conservation and Carbon Trading issues for 2024/25. It has also conducted training for various stakeholders, though those at the local levels, where carbon trade projects are most commonly implemented, were not covered

[12] National Climate Change Response Strategy 2021-2026

### 3.3 Inadequate Development and Dissemination of Key Information such as Greenhouse Gases Baseline Data

The review of Tanzania's Forest Reference Emission Level Submission (2017), the Second National Communication to the United Nations Framework Convention on Climate Change (2014), and project-specific baseline data noted that the VPO, through the NCMC, successfully developed and disseminated key baseline information.

However, discrepancies were noted, including the use of outdated national baseline data from 2014 to 2017, which lacked accuracy in tracking emission reductions and hindered the implementation of effective mitigation strategies. Also, there was inadequate sector coverage as energy, transport and industry were not covered in the National Communication Reports on the Status of Greenhouse Gases. This was contrary to Regulation 9(1) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), which requires the VPO to provide key information, such as baseline data, to the proponent of the carbon trading project.

Moreover, the Measurement Reporting and Verification (MRV) Report of 2016 did not provide for project baseline data at the project level, leading to over-reliance on the international databases that keep the records of carbon trading activities.

The detailed findings regarding the development and dissemination of all key baseline data are outlined below:

#### 3.3.1 Inadequate Development and Updating of Greenhouse Gases Baseline Data

The audit noted that VPO did not develop and update the baseline information related to the reduction of greenhouse gas emissions. The review of the "Initial and Second National Communication to the UNFCCC" reports indicated that the National GHG Inventory had not been regularly updated. The first communication reported data collected between 1993 and 2004, while the second communication covered data from 1995 to 2005 but was only submitted in 2014. This 11-year gap was contrary to Regulation

9(1) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), which requires the VPO to provide key information, such as baseline data, to the proponent of the carbon trading project. Also, it was contrary to Article 4.9, which requires member states, including Tanzania, through VPO, to communicate a nationally determined contribution every five years.

Furthermore, as of October 2024, during the period of this audit, nearly 10 years since the second report was submitted to the UNFCCC by VPO. This gap in reporting has left the country without current GHG inventory information that could generally be used as baseline data for emissions and the management of carbon trade.

Through the review of Tanzania's Forest Reference Emission Level submitted to the UNFCCC in November 2017 by VPO, the audit noted that VPO, through NCMC, managed to provide the Forest Reference Emission Level used as the baseline data, particularly for the forest sector. However, this document has not been updated since its submission, hence contributing to outdated Forest Reference Emission Level when referred to as baseline data.

Similarly, the review of section 9.1 of the Second National Communication to the UNFCCC revealed that the absence of up-to-date carbon trade baseline information was due to limited national capacity in terms of personnel, knowledge and skills, technology and funding. This contributed to overreliance on finances from development partners[13].

The Second National Communication to the UNFCCC highlighted that the gap in outdated baseline data resulted from the lack of a comprehensive climate change policy and legislation to coordinate and consolidate climate change activities at the national level. This has hindered the integration of climate change issues into national development priorities and plans.

On the other hand, the review of the Annual Action Plans and MTEF from VPO did not show activities or timelines for establishing National-Level Baseline Data, which resulted in irregularities in the updates. This gap

[13] Part 9.1 of the Second National Communication to the UNFCCC

hindered consistent monitoring of GHG emissions and limited the country's ability to accurately assess progress towards climate targets.

Furthermore, the review of the report titled "Final Report on Enhancing the Measuring, Reporting, and Verification (MRV) of Forests in Tanzania through the Application of Advanced Remote Sensing Techniques," dated February 2016, indicated that MRV activities were not project-based. The report covered the period from May 2011 to August 2015, and since then, there has been no update or new MRV report issued, indicating a gap in MRV activities beyond 2015.

The Second National Communication to the UNFCCC (2014) highlights that the inadequate development and updating of greenhouse gas baseline data in Tanzania is primarily due to insufficient technical and financial resources allocated for climate change projects across various sectors.

The use of outdated baseline information on carbon trade significantly impacts Tanzania's ability to participate effectively in international compliance and carbon trading projects, particularly in country-to-country transactions. Furthermore, the absence of accurate data also hinders the country's ability to track progress on emissions and reductions and implement effective mitigation strategies.

### 3.3.2 VPO did not Adequately Report and Disseminate the Baseline Data

The review of the report on the status of carbon trade projects by the VPO and NCMC, along with the Action Plan for Monitoring and Evaluation for the Financial Years 2020/21 to 2023/24, revealed that the VPO did not adequately report and disseminate the GHG inventory (baseline information). This was contrary to Article 4.12 of the Paris Agreement, which requires NDCs communicated by Parties to UNFCCC to be recorded in a public registry maintained by the secretariat.

On the other hand, the audit, through the review of the Strategic Plan MTEF and Annual Action Plans from VPO, noted the lack of mechanisms for collecting, analysing, reporting and disseminating baseline data. The audit further observed the issues related to the collection, analysis or dissemination of baseline data to stakeholders across the country and noted that they were not adequately captured. This was due to inadequacy in planning, which further highlighted the absence of a structured process for managing and sharing critical baseline information related to carbon trade.

Likewise, the review of both the Medium-Term Expenditure Framework (MTEF) and Annual Action Plans from the VPO revealed that the observed situation was attributed to a limited budget, as no funds were allocated for collecting, analysing, reporting and disseminating baseline data. For instance, the review of the VPO's Action Plan for Monitoring and Evaluation (M&E) of Development Projects for the financial year 2023/24 revealed that no budget was allocated for the purchase of tools necessary for collecting, analysing, reporting and disseminating baseline information. Apart from that, the Audit noted that there was an inadequate number of staff with adequate skills and capacity to collect, analyse, report, and disseminate baseline information.

This has consequently resulted in the following:

***(i) Inadequate Sectors Coverage on GHG Inventory***

The review of the report entitled "Initial National Communications to the UNFCCC prepared by VPO in 2003, revealed that the GHG inventory covered forestry, waste management, energy, industrial processes, agriculture, and land use sectors while leaving other important sectors such as livestock, transportation and water and blue economy that are crucial and potential in carbon trading. Through the review of the Tanzania Second National Communication to the UNFCCC prepared by VPO in 2014, the audit highlighted that one of the challenges under GHG inventory was the unavailability and access to accurate data in the potential sectors.

Likewise, the review of the Second National Communication to the UNFCCC prepared by VPO in 2014 revealed that the gaps in the GHG Inventory were attributed to technical difficulties that hindered the updates for various sectors. This was due to the financial constraints to enable the annual submission of GHG inventories. Moreover, there were limited initiatives by VPO to secure funds from developed countries in accordance with Article

4.3 of the UNFCCC, which emphasizes assistance for developing nations in meeting their climate reporting obligations.

The lack of up-to-date GHG information hampers the country's ability to accurately measure and report emissions reductions to relevant sectors. Such a situation has affected the country's capacity to monitor progress toward emissions reduction targets on the overall climate adaptation measures.

***(ii) Risk of not Attaining the International Agreements on GHG Emission Levels***

The United Republic of Tanzania has committed to aligning with international frameworks like the UNFCCC by preparing the National Greenhouse Gas (GHG) Inventory, National Communication (NC), and Forest Reference Emission Level/Forest Reference Level (FREL/FRL). The absence of proper enforcement of the arrangements towards these commitments creates a high risk of not meeting international requirements and agreements.

### 3.3.3 Inadequate Validation and Verification of the Generated Carbon Credits by Project Proponents



The audit noted that VPO, through NCMC, did not regularly validate and verify the carbon credits reported by the project proponents. The review of the Annual Performance Reports from VPO did not indicate any effort/activity to facilitate verification and validation of the accuracy of the generated carbon credits. Moreover, interviews with officials from Tanganyika, Mbulu, and Kiteto District Councils indicated that the project proponents, through the international verifiers, usually prepared baseline information, and neither VPO nor NCMC undertook verification and validation. This deviates from Part (iii) of the delegation of the power (under Regulation 7) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), which requires NCMC to measure, report, and verify greenhouse gases (MRV).

Several factors hindered the NCMC from verifying and validating the baseline data, as discussed hereunder:

### (i) Shortage of Equipment

Interviews with NCMC officials revealed a shortage of equipment for measuring, reporting, and verifying baseline data nationwide. While some basic equipment, such as vernier callipers for measuring tree dimensions, were available at NCMC, more sophisticated tools, like remote sensing technology, satellite imagery, and carbon estimation software, were lacking. However, the NCMC did not undertake a needs analysis to establish the actual requirements for tools and equipment for Measuring, Reporting, and Verification (MRV).

Through the review of the VPO's Medium-Term Expenditure Framework (MTEF), Annual Action Plans, and corresponding Progress Reports, the audit revealed that the VPO did not allocate funds for acquiring the necessary equipment to support the National Carbon Monitoring Centre (NCMC).

The noted shortage of equipment hindered the NCMC's capacity to effectively monitor, report, and verify carbon projects, being crucial aspects for meeting national commitments and ensuring compliance with the international carbon trade standards. However, it was reported that this was due to the fact that NCMC was not fully operational, recognized, or equipped to carry out all of its intended functions effectively.

### (ii) Lack of a System for Validation and Verification of the Generated Carbon Credits

The audit noted that VPO did not have the MRV System to validate and verify the generated carbon credits. The interviews with officials from the managing authorities and LGAs revealed that VPO, through the NCMC, primarily relied on external verifications conducted under international frameworks, such as Verra[14], which is one of the globally recognized standards for validating carbon projects. For instance, a site visit to the Ntakata Mountains, Makame Savannah, and Yaeda-Eyasi carbon trade projects in Tanganyika DC, Kiteto DC, and Mbulu DC, respectively, revealed that carbon credits were traded without proper validation or verification of

[14] a non-profit organization that develops and manages standards for sustainable development, climate action, and responsible business practices.

their accuracy by the VPO or NCMC. Instead, the credits relied solely on records provided by international verifiers such as Verra.

However, this reliance on external frameworks has limited the VPO's capacity to conduct independent, local verifications and assessments, which is crucial for monitoring the integrity of carbon trade and ensuring compliance with both national and international climate commitments. The absence of local verification also hindered the development of a robust, self-sustaining national system for monitoring and validating carbon projects. This situation raises concerns about carbon trade initiatives' transparency, accountability, and long-term sustainability.

**(iii) Absence of the National Guidance on Validation and Verification of the Reported Baseline Data by Proponents**

The audit highlighted that NCMC, in collaboration with the VPO, lacked local/domestic guidelines to support the verification of the accuracy of the information on baseline data. Instead, they rely on the international process managed by international entities such as Verra, which the UNFCCC accredits to carry out the process.

This deficiency has led to issues such as an inadequate data information system, improper data evaluation, and an overreliance on a single criterion (international guideline) when performing validation and verification.

The audit, after conducting the review of the Medium-Term Expenditure Framework (MTEF) and Action Plans for Monitoring and Evaluation from the Financial Years 2020/21 to 2023/24, revealed that no budget was allocated by the Vice President's Office (VPO) to support either validation or verification of baseline data reports.

This lack of allocation was attributed to inadequate prioritisation of baseline data verification, which is a critical component in managing carbon trade.

The only budget allocation identified was for facilitating the collection, organization, compilation, and verification of REDD+ information for the REDD+ webpage, as detailed in **Table 3.8**.

**Table 3.8: Allocated Budget for Validation and Verification of the Baseline Data**

| Financial Year | Activity | Budgeted Amount (TZS) |
|---|---|---|
| 2021/22 | No activity was planned | Nil |
| 2022/23 | Facilitate collection, organization and compiling and verification of REDD+ information for the REDD webpage | 35,850,000 |
| 2023/24 | No activity was planned | Nil |

***Source:*** Action Plan for Monitoring and Evaluation of Development Projects, 2023/24

The lack of adequate integration of baseline data validation and verification into the VPO's plans and budgets, as shown in **Table 3.8**, raised from several factors: low prioritization, limited financial resources, insufficient awareness of its importance, and reliance on international practices.

This deficiency undermined national ownership of the validation and verification process, restricting the country's ability to independently oversee and manage carbon projects. Consequently, it diminished control over critical aspects of carbon trading and reduced the effectiveness of ensuring compliance with the national priorities and standards.



## 3.4 Ineffective Management of the Initiation and Planning of Carbon Trade Activities in the Country

The review of the minutes from the National Carbon Projects Assessment Technical Committee held on 17 and 18 July 2023 and the audit of monitoring and evaluation reports noted that VPO through NCMC did not effectively manage the initiation and planning of various carbon trade projects. This was evident from the delay in the review of concept notes, the lack of verification of project proponents' capacity, and the improper coordination of the functions of the National Carbon Projects Assessment Technical Committee.

However, this was contrary to Para 3.1.1 of the National Carbon Trading Guidelines, 2022, which outlines that project proponents must possess relevant carbon trading expertise, be registered with the appropriate authorities, demonstrate financial capacity and adhere to all applicable legal requirements before investing in carbon trade projects. VPO and NCMC are expected to verify these requirements during the initiation and planning of the projects.

Further details are presented below:

### 3.4.1 Delay in the Review and Scrutinization of the Project Proponents' Concept Note and Project Documents by VPO

The review of the minutes from the National Carbon Projects Assessment Technical Committee meetings held in July 2023, December 2023, and May 2024 revealed that, during the audit period, 55 carbon project applications were submitted. Of these, only nine projects were reviewed and scrutinized on time (within 30 days). Seven projects had not been reviewed or scrutinized by the time of the audit, while 39 projects experienced delays in the review and scrutiny process beyond 30 days as per the Guidelines. It was noted that this is contrary to Para 3.2.1 the National Carbon Trading Guidelines, 2022, which outlines the application procedures and insists the Appropriate Authority, in this case, the VPO through NCMC, review and scrutinize the Concept Note or Project Document within 30 days from the date of receipt of concept note or project document.



The status of these delays is summarized in **Table 3.9**, more detailed information provided in **Appendix VI**.

**Table 3.9: Status of the Review and Scrutinization of the Project Proponents' Project Documents**

| Status | Number of Projects | Percentage (%) |
|---|---|---|
| Number of Delayed Projects | 39 | 71 |
| Number of Projects Reviewed on Time (within 30 Days) | 9 | 16 |
| Number of Projects Not Reviewed | 7 | 13 |
| **Total** | **55** | **100** |

***Source:*** Auditors' Analysis of the Registration of the Projects and the Minutes of Reviewing and Scrutinizing the Concept Note and Project Documents, 2024

The delayed review and scrutiny of the carbon trade projects were primarily attributed to the untimely undertaking of the scheduled quarterly review meetings by the National Carbon Projects Assessment Technical Committee.

Based on the review of the minutes from the National Carbon Projects Assessment Technical Committee, it was noted that, up to the time of this audit, the committee had only met three times. **Table 3.10** provides the details of the meetings held, including the dates as well as the extent of delays.

**Table 3.10: Delayed Meetings of the National Carbon Projects Assessment Technical Committee**

| Number of the Minutes | Planned Month | Actual Month | Delay (Months) |
|---|---|---|---|
| First Meeting | March 2023 | July 2023 | 4 |
| Second Meeting | June 2023 | December 2023 | 6 |
| Third Meeting | December 2023 | May 2024 | 5 |

***Source:*** Review of the Minutes of the Meeting of the National Expert Committee to Assess Carbon Projects, 2024

**Table 3.10** highlights that the first meeting, originally scheduled for March 2023, was held in July 2023, four months later than anticipated. The second meeting took place six months later than the planned timeline. The third meeting, which was held in May 2024, five months after the planned date. The delays in reviewing and scrutinizing carbon project applications were attributed to inadequate prioritization of tasks and lack of proper commitment from the responsible parties. The interview with officials from VPO revealed that the delay was caused by waiting for proponents to meet all requirements, as the National Carbon Projects Assessment Technical Committee could not convene without a fully qualified proponent.

The delayed commencement and irregular scheduling of the National Carbon Projects Assessment Technical Committee meetings further hindered carbon projects' timely review and approval. This delay obstructed the prompt engagement of project proponents and the implementation of carbon trade.

### 3.4.2 VPO did not Verify the Project Proponents' Capacity on Carbon Trade

The audit conducted a review of the National Carbon Projects Assessment Technical Committee meeting minutes dated July 2023, December 2023, and May 2024 and revealed that no tasks had been delegated to the committee to evaluate the expertise and financial capacity of project proponents. Despite the requirements outlined in Para 3.1.1 of the National Carbon Trading Guidelines, 2022, which mandate VPO to verify that the proponents demonstrate relevant expertise, financial capacity, and legal compliance, the minutes showed that this critical aspect of the project evaluation process was not addressed.

Furthermore, when the audit reviewed the project files from the managing authorities to assess compliance with this requirement, no evidence was noted to indicate that the necessary evaluations had been conducted. This lack of documentation further emphasizes the absence of due diligence in assessing the qualifications and financial capacity of project proponents, which is essential to ensure the successful and sustainable implementation of carbon trade in the country.

This occurred because the VPO did not specify who was responsible for assessing the expertise and financial capacity of project proponents, despite being mandated under Regulation 9(1)(m) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), to carry out all necessary actions in this regard.



The lack of assessment of project proponents' expertise and financial capacity increases the risk of unqualified proponents engaging in carbon trading projects, which may lead to project non-compliance with the regulatory standards.

### 3.4.3 Inadequate Coordination of the Functions of the National Carbon Projects Assessment Technical Committee by VPO

Appendix 1 of the Minutes of the First Meeting of the National Expert Committee to Assess Carbon Projects, held in July 2023, outlined the procedures of regulating the committee and indicated the frequency of the meetings to be four per annum.

The audit noted inadequate coordination of the functions of the National Carbon Projects Assessment Technical Committee. This was reflected by a delay (as indicated in **Table 3.10**) and irregularity in the National Carbon

Projects Assessment Technical Committee meetings, contrary to Regulation 10 of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), which requires the Director of Environment from VPO to enhance sectoral coordination and mobilisation of stakeholders for effective control and management of carbon trading.

The review of the minutes from the National Expert Committee to assess carbon projects highlighted that, up to October 2024[15], at the time of this audit, the Committee had only held three meetings compared to eight expected meetings. **Table 3.11** provides the details of the meetings held by the committee.

**Table 3.11: Status of the Conducted National Carbon Projects Assessment Technical Committee Meetings**

| Financial Year | Planned Meetings | Meetings Held |
|---|---|---|
| 2022/23 | 1 | 0 |
| 2023/24 | 4 | 3 |
| **Total** | **5** | **3** |

***Source:*** Auditors' Analysis of the Minutes of the Meeting of the National Expert Committee to Assess Carbon Projects, 2024

**Table 3.11** highlights that only three out of five required meetings were conducted. All meetings were conducted in the financial year 2023/24. No meeting was held in the financial year 2022/23. This state of not conducting meetings during that period was due to the reason that the regulation establishing the committee was gazetted on 26 October 2022, and the subsequent quarter was used to establish the National Carbon Projects Assessment Technical Committee.

The noted situation was attributed to the fact that the VPO did not provide adequate guidance and funds to ensure that the National Carbon Projects Assessment Technical Committee conducted its meetings as required. This led to irregularities in undertaking the committee meetings, as highlighted in **Table 3.11** of this report.

[15] *This assessment did not consider financial year 2021/22 as this was time when the regulation and guideline were issued.*

### 3.4.4 Lack of Submission of Recommendations to VPO by the National Carbon Projects Assessment Technical Committee

The review of the correspondence files and documents from the VPO did not show any evidence of recommendations from the Committee being submitted to the VPO. This was contrary to Regulation 12 (a) and (b) of the National Carbon Trading Guidelines, 2022, which requires the National Carbon Projects Assessment Technical Committee to scrutinize the concept notes and project documents referred to it and provide recommendations to the Designated National Authority or National Focal Point.

Inadequate coordination of reporting was further revealed by a lack of formal documentation or communication between the National Carbon Projects Assessment Technical Committee and the VPO, leading to an absence of records on the decisions and recommendations by the VPO on the reviewed and scrutinised carbon trade projects.

Interviews with the VPO officials indicated that the reason for this was that the VPO, as the secretariat for the National Carbon Projects Assessment Technical Committee, did not require the committee to issue formal reports or recommendations.



As a result, there was no official record to support the decisions made regarding carbon trade projects, undermining accountability and transparency. This gap in documentation further hampers the VPO's ability to effectively track progress and ensure that the carbon trade projects meet regulatory and environmental standards.

## 3.5 Inadequate Guidance Over the Management of Contractual Agreements between Parties Involved in Carbon Trade

The review of the contract documents between Carbon Tanzania Limited and the managing authorities[16] in Tanganyika, Mbulu, and Kiteto District Councils indicated inadequate guidance on the management of the contractual agreements by responsible actors such as the VPO, contrary to

[16] Local communities/villages who are the owners of land on which the carbon trade project is undertaken in Tanganyika, Mbulu, and Kiteto District Councils

Regulation 29(1) of Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) which requires persons intending to collaborate on a carbon trading project to enter into contractual agreements. The VPO did not provide adequate guidance on the establishment of proper arrangements to review agreements between involved parties, nor did it provide adequate guidance on the involvement of necessary staff during the preparation and signing of contracts.

The VPO, as the overall entity responsible for matters relating to climate change, did not emphasize the participation of the Office of the Attorney General in vetting contracts for legality and compliance. Furthermore, the agreements lacked sufficient emphasis on promoting environmental (forest) conservation and sustainable development, undermining the overall goals of the carbon trade. Some of the specific aspects of the contractual agreements are explained hereunder:

### 3.5.1 The Contractual Agreements between Parties Involved in the Carbon Trade were not Reviewed by Key Players such as VPO

Based on the review of the Annual Action Plans and Progress Reports of Carbon Trade projects from the VPO, the audit noted that, the VPO, as the key player in the carbon trade in the country, did not review the agreements between the involved parties. This gap was underscored by the absence of designated staff for this purpose. Key personnel from the VPO, such as legal officers, accountants, foresters, and environmentalists, were not appointed to review or provide inputs on the drafted contractual agreements. This meant limited guidance on the review of contractual agreements from the VPO, despite the provision of Regulation (9)(1)(c) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) which mandates the VPO to provide policy guidance on carbon trading and other crediting mechanisms that promote investment to ensure social, cultural, economic, and environmental justice.

This was evidenced through the review of the consent letter with Ref. No KTVC/MDC/F.30/10/41 dated 28 August 2023, from Tanganyika District Council to the National Carbon Monitoring Centre (NCMC) that revealed the non-involvement of the VPO in the contract review process. The letter further indicated that the review was conducted solely by the Tanganyika

DC and PO-RALG without VPO being involved. Likewise, by noting the provision of the report on the carbon trade project submitted to the Local Government Affairs Committee on 16 August 2024, PO-RALG lacked the necessary expertise in carbon trading.

This oversight compromised the legal integrity of the agreements, as contracts lacked thorough vetting for compliance with national laws. Without this review, there was a risk of financial mismanagement. For example, the audit noted that there were no national plans for the utilisation of revenue generated from the carbon trade projects in the visited areas of Tanganyika DC, Kiteto DC, and Mbulu DC. On the other hand, it was revealed that a lack of input from technical experts on environmental matters could result in environmental risks being overlooked, potentially affecting the quality and validity of contractual agreements for carbon trade projects. Attending the contract review process without the involvement of VPO accelerated the risk of signing contractual agreements with different terms and conditions in spite of being in a similar situation.

The noted shortfalls were attributed to the following:

(i) **Absence of Standardized Procedures:** The VPO did not establish or enforce standardized procedures for reviewing carbon trade projects' contracts as a result of inadequate policy guidance on the matter. This lack of formalized procedures resulted in inconsistencies in how contracts were evaluated and managed. Furthermore, it hindered effective oversight of the contracts. For example, the contract duration for the Ntakata Mountains carbon trade project in Tanganyika DC is 40 years (2024–2064), while the contract period for both Makame Savannah and Yaeda-Eyasi carbon trade projects in Mbulu DC and Kiteto DC is 30 years each, from 2024 to 2054.

(ii) **Inadequate Prioritisation:** The VPO did not demonstrate the necessary arrangements to prioritise the review of carbon trading contracts. As a result, the process was not given the attention it required. This was attributed to the fact that the National Carbon Trading Guideline, 2022, did not provide guidance on the management of carbon trade contracts.

As a result of this discrepancy, the audit noted the following implications:

### (a) Non-submission of the Power of Attorney on the Transferred Powers by the Proponent during the Signing of Contracts

The review of the amended contracts for the implementation of carbon trade projects in Ntakata Mountains (Tanganyika DC), Yaeda-Eyasi (Mbulu DC), and Makame Savannah (Kiteto DC) revealed that the Finance Manager signed the contracts without presenting an authenticated Power of Attorney to grant legal authority to act on behalf of the Carbon Tanzania Limited. This practice violated Section 14 of the Registration of Documents Act CAP 117, which mandates that any document must be registered by one of the executing parties or their appointed attorney.

The absence of this requirement exposes carbon trade projects to risks of non-compliance with legal requirements and undermines the integrity of contractual agreements.

### (b) Non-compliance with Carbon Trading Regulations

The review of the VPO's performance report on carbon trade for July 2024[17] uncovered several instances of land leases being granted. In Kilolo District Council, villages entered into land lease agreements with companies for a deposit of TZS 23,000 per acre per year, which does not comply with the established carbon trade guidelines. The Ruangwa District Council also entered into a land lease agreement that included its forest at Nandimba and 14 other village-owned forests. This arrangement contravenes para 4.1.1 of the National carbon Trading Regulations, 2022, which clearly outlines that the land should not be leased to the project proponent during the implementation of the carbon trade project.

This amplifies the risk of generating revenue from carbon trade, as outlined in the cost-benefit arrangements indicated in the National Carbon Trading Guidelines, which mandate that 51% of the accrued revenue be allocated to the Managing Authority. Any deviations or non-compliance with the regulations could disrupt the proper distribution of funds, potentially affecting the financial outcomes of the carbon trade and undermining the sustainability of the Managing Authority's role in the initiative.

[17] Biashara ya Kaboni na Mchango wake Nchini Julai, 2024

Moreover, the identified challenge stemmed from the VPO's inadequate oversight of the contractual agreements, resulting in contracts that did not comply with carbon trading requirements and further compromising their legal validity.

### 3.5.2 Inadequate Guidance on the Involvement of Required Staff during Preparation and Signing of Contractual Agreements

The review of project documents and interviews with officials from the VPO and NCMC highlighted that the VPO, in collaboration with other key actors, did not facilitate the necessary guidance to ensure the involvement of qualified personnel in preparing and signing contract agreements. The audit noted that while legal officers, economists, accountants, and foresters from the Regional Secretariats (RSs) and Local Government Authorities (LGAs) participated in the contract negotiation and evaluation processes, their engagement was not systematically coordinated or directed by the VPO. The non-involvement of the VPO in the contract agreement process is contrary to Regulation 9(2) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), which mandates the VPO to provide guidance to ensure the involvement of multidisciplinary experts in advising on carbon trading matters, including the preparation and signing of contract agreements.



Furthermore, the Audit noted that the staff members who were involved in preparing and signing contract agreements lacked sufficient expertise and experience in carbon trading activities, and it was revealed that they had not received any training in carbon trade-related matters. Exploring this matter further, the audit conducted a review of the training program and revealed that the VPO did not include any training program for those officials in its plans and budget. As such, this amounted to a lack of oversight that compromised the multidisciplinary approach required for comprehensive and legally sound contract management in the carbon trade. However, the Audit noted that the VPO did not issue engagement letters to provide guidance on the process since it was viewed to lack the necessary capacity in terms of expertise and human resources to effectively oversee the procedures for preparing and signing the contracts.

Moreover, interviews conducted with officials from NCMC, TFS, and the District Councils of Tanganyika, Mbulu, and Kiteto revealed that the contracting processes (from drafting the contract to signing) for carbon trade projects did not fully comply with the public procurement procedures outlined in the Public Procurement Act (PPA) and its regulations from Procurement Regulatory Authority (PPRA). Similarly, the audit noted through the legal officers of these district councils that the deviation that occurred was due to the reason that the carbon trade projects in their areas of jurisdiction did not involve the direct use of public funds. Instead, those carbon trade projects followed the procedures specified in the National Carbon Trading Guidelines, 2022. Therefore, the Audit revealed a lack of adherence to the established procurement guidelines, which could undermine transparency, accountability, and the overall integrity of the contract management process.

Inadequate adherence to the public procurement procedures in the carbon trade projects increases the risk of reduced transparency since deviating from the established procurement guidelines undermines the clarity and consistency of the contracting process. Likewise, as noted by this audit, the lack of strict adherence to procurement regulations diminishes the ability to hold those responsible for managing the contracts accountable.



The limited guidance on the involvement of the required staff during the preparation and signing of contractual agreements by the VPO raises additional concerns about the completeness of the process. Such practice indicates the potential deficiencies in due diligence that could affect the integrity of the contractual agreements in the carbon trade projects. This lack of thoroughness may undermine the protection of public interests, consequently limiting the successful implementation of the projects.

### 3.5.3 VPO did not Coordinate the Involvement of the Office of the Attorney General in Vetting the Carbon Trade Contractual Agreements

The review of contract documents from Tanganyika, Mbulu and Kiteto District Councils and interviews with legal officials of the respective LGAs revealed that none of the contract documents were submitted to the Office of the Attorney General for vetting despite the complexity and sensitivity

of the carbon trade projects. This was contrary to Para 7 of the Office of the Attorney General (Discharge of Duties) (Provision of Legal Opinion by State Attorneys and Law Officers in Public Service) Guidelines, 2022, which requires the director or head of a Legal Department or unit to assess the nature and complexity of each request for legal opinion and assign it in writing to a state attorney or law officer for his action according to law.
However, it was noted that the observed situation regarding carbon trade projects arose because of the nature of these projects' contracts being marked differently from the standard contracts managed under the Public Procurement Act (PPA). Unlike typical procurement agreements, these contracts did not follow the established procedures, as they were not categorized under traditional procurement frameworks.

Furthermore, the interviews with officials from the visited LGAs revealed that carbon trade projects did not involve direct monetary investments exceeding TZS 1 billion. Having such views, they believed that the investments they experienced in the carbon trade projects did not require oversight by the Office of the Attorney General. On the contrary, the monetary value of transactions in the contracts reviewed in Tanganyika, Mbulu, and Kiteto District Councils revealed that the value of these contracts exceeded the TZS 1 billion threshold. On top of that, the unique and complex structure of the carbon trade projects, with their focus on environmental outcomes rather than immediate financial expenditures, justified the assumption that the conventional oversight mechanisms were unnecessary.

The absence of the Attorney General’s involvement raises concerns about whether sufficient legal safeguards were in place to protect the interests of the communities and ensure compliance with broader national and international obligations related to carbon trade and environmental governance.

Additionally, the lack of guidance from the Vice President’s Office (VPO) on ensuring that Local Government Authorities (LGAs) undertake vetting of contracts through the Office of the Attorney General led to each council establishing its own terms and conditions for the contracts. As a result, the contract periods were not standardized across the sampled LGAs. For instance, a site visit by the team at the sampled carbon trade projects revealed that, Carbon Tanzania Limited entered into a 40-year contract with eight villages in Tanganyika District Council; however, the Attorney General's involvement was not facilitated in the process by the VPO. Instead, the Council's Legal Officers prepared and reviewed the contracts in collaboration with the Regional Secretariat Office of the Katavi region. A similar situation was observed in Mbulu and Kiteto District Councils, where contracts were also finalized without the necessary review or input from the Attorney General's Office.

This inconsistency complicates the enforcement of the contracts and makes it challenging to manage expectations between the parties involved. It also amplifies limited flexibility as a long-term contract may restrict the villages from pursuing other potentially more profitable carbon trade opportunities that could arise in the future.

### 3.5.4 VPO did not Ensure Enhancement of Forestry Conservation and Sustainable Development in the Contractual Agreements

The review of contract documents for carbon trade projects in Tanganyika, Mbulu, and Kiteto District Councils highlighted a gap in the contractual framework. While environmental conservation (forestry conservation) was prominently featured as the primary goal of the carbon trade projects, no clear provisions were made to allocate funds specifically for these critical activities. This oversight directly violates Regulation 15 (e) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), which explicitly requires that a portion of the revenue generated from carbon trading be earmarked for the advancement of environmental conservation initiatives. Para 1.2.1 of the National Carbon Trading Guidelines, 2022, also insists on enhancing the country's contribution to greenhouse gas emission reduction efforts while ensuring environmental conservation and sustainable socio-economic development.

The situation was attributed to the fact that VPO did not provide guidance and supervision during the preparation and signing of the carbon trade contracts in Tanganyika, Mbulu and Kiteto DCs, where carbon trade projects were being implemented.

The VPO plays a critical role in ensuring that carbon trade agreements align with national environmental and socio-economic development priorities. Its lack of involvement allowed the Local Government Authorities (LGAs) responsible for managing the contracts to create terms and conditions without a unified framework to ensure that the environmental conservation (forestry conservation) was adequately prioritised. Consequently, these councils did not include provisions in their plans and budgets to allocate specific funds for forestry conservation despite being a key objective of the carbon trade projects.

The insufficient focus on environmental (forestry) conservation during the planning and budgeting processes, exemplified by the absence of specific provisions for conservation activities, has contributed to the unsustainable management of forests. For example, the Ntakata Forest Reserve carbon trade project in Tanganyika District Council has experienced signs of deforestation. The review of the Report titled "The Climate, Community & Biodiversity (CCB) Standards and the Verified Carbon Standard (VCS) Project Description for the Ntakata Mountains REDD Project", issued on 05 June 2020, reveals that the forest continues to degrade though the rate has been gradually decreasing. Details are indicated in **Table 3.12**.



**Table 3.12: Annual Rate of Deforestation of Ntakata Forest Reserve in Tanganyika DC**

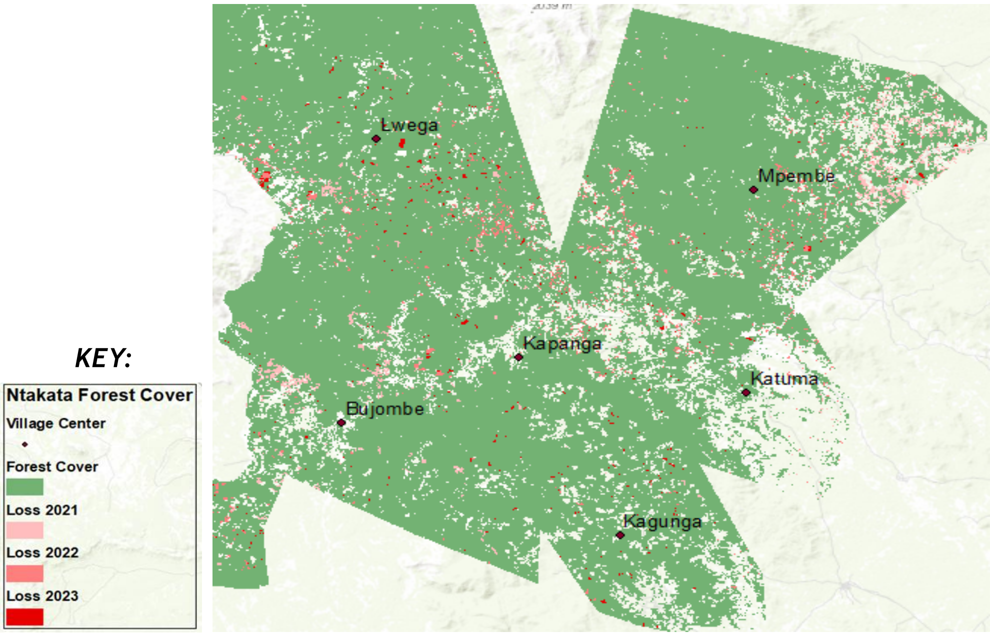
| Year | Status of Deforestation (Ha) |
|---|---|
| 2021 | 6,914 |
| 2022 | 7,435 |
| 2023 | 4,972 |
| 2024 | 4,830 |
| **Total** | **24,151** |

***Source:*** The Climate, Community & Biodiversity (CCB) Standards and the Verified Carbon Standard (VCS) Project Description for the Ntakata Mountains REDD Project, Issued on 5 June 2020

**Table 3.12** reveals that 24,151 hectares of forest were cleared in the area, which accounts for 11% of the total forest reserve of 216,944 hectares. This deforestation occurred within three years, highlighting a significant loss of forest cover over a relatively short period.

Furthermore, the forest loss map for the Ntakata Forest Reserve **(Figure 3.6)** produced by Carbon Tanzania Limited in 2023 illustrates the persistent degradation of the Ntakata Forest Reserve, revealing an alarming trend of continued and expanding deforestation. This map underscores the critical need for urgent action to enforce environmental protection, particularly regarding forest conservation, to curb further ecological damage and preserve the forest's biodiversity, necessary for sustainable carbon trading opportunities.

**Figure 3.6: Forest Loss Map for Ntakata Forest Reserve in Tanganyika DC**




*Source:* Satellite Images Produced by Carbon Tanzania, 2024

**Figure 3.6** shows an increase in the rate of deforestation from 2021 to 2023, as indicated by the red spots on the map. This increasing trend in deforestation was attributed to the limited support for environmental conservation activities in the project area. For instance, during the site visit to the Ntakata Forest Reserve in Tanganyika DC, the Village Game Security (VGS) personnel were not provided with the necessary tools and equipment to support forest conservation activities, including patrolling the forest.

As a result, the risk of further forest loss has escalated, reducing the forest's capacity to absorb greenhouse gases and undermining the effectiveness of carbon trading initiatives within the jurisdiction.

## 3.6 Inadequate Management of the Implementation of Carbon Trade Activities

The review of Implementation Reports from the VPO and NCMC revealed several shortcomings in the management of the carbon trade activities, including inadequate monitoring and evaluation systems, inadequate oversight of cost and benefit-sharing schemes, lack of transparency in carbon pricing, and inability to ensure corporate social responsibility by project proponents. Such shortcomings were against Part (i) of Appendix 1 of the National Carbon Trading Guidelines, 2022, which gives obligations to the VPO to regulate the projects/programs registered for carbon trading. The details are indicated hereunder:

### 3.6.1 VPO did not Conduct Monitoring and Evaluation of Carbon Trade Activities

The review of the Monitoring and Evaluation (M&E) Plans from the VPO revealed that aspects of monitoring and evaluation for carbon trade projects were not addressed. During site verification, the audit team reviewed documents such as registration books and performance reports from the managing authorities and Local Government Authorities for the Ntakata Mountains REDD Project, Yaeda-Eyasi REDD Project, and Makame Savannah REDD Project, located in Tanganyika, Mbulu, and Kiteto District Councils, respectively.

The review of these documents confirmed that the VPO had not implemented any monitoring and evaluation activities due to the absence of funds to cater for this activity. This is contrary to Regulation 42 of the Environmental Management (Control and Management of Carbon Trading Mechanism) (Amendment) Regulations, 2023, which requires the VPO to conduct periodic monitoring and evaluation of registered carbon trading projects to measure and assess their success and performance.

This resulted from the lack of prioritization of monitoring and evaluation for carbon trade, leading to inadequate consideration of these activities during planning and budgeting. The review of the Medium-Term Expenditure Framework (MTEF) revealed that the VPO planned and budgeted for monitoring and evaluation of carbon trade-related activities for only one financial year, 2023/24. This was further attributed to the limited prioritisation of carbon trading activities within the VPO, as reflected in its reports.

The planned activities in the MTEF included monitoring the implementation of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), assessing carbon trade investment opportunities in mangrove forestry resources, and visiting implementation teams and district project coordination committee members. However, none of these planned activities had been executed by the VPO at the time of this audit, as no budget was disbursed for the activity.

The review of the delegation of power, as reported in the *Gazeti la Jamhuri ya Muungano wa Tanzania* dated 30 December 2024, along with interviews with officials from the NCMC, revealed that the NCMC had not been delegated the authority to monitor and evaluate carbon trade activities. This was due to the fact that NCMC is a fully-fledged institution that monitors and evaluates carbon trade activities in the country. In this case, the NCMC's responsibilities were restricted to coordinating the National Carbon Projects Assessment Technical Committee, maintaining a registry of carbon trade projects, and measuring, reporting, and verifying greenhouse gas emissions. This limited delegation did not grant the NCMC comprehensive authority to oversee and manage carbon trade projects.

Moreover, out of the ten responsibilities assigned to the VPO under the National Carbon Trading Guidelines, 2022, only four (40%) were delegated to the National Carbon Monitoring Centre (NCMC). The remaining 6 responsibilities (60%) were noted to be inadequately managed by the VPO, as they were neither incorporated into both plans and budgets nor supported by any collaborative framework to ensure their joint execution by the VPO and NCMC. This limitation has hindered NCMC's mandate to effectively oversee and manage carbon trading activities in the country.

On the other hand, this limitation also hindered the ability of the VPO to enforce compliance and manage carbon projects effectively. The reason for this state of affairs issue was the lack of a well-defined institutional framework, particularly regarding the monitoring and evaluation of carbon trade activities, which resulted in unclear roles and responsibilities.

Without a proper monitoring and evaluation system, tracking the progress and impact of carbon trading projects is difficult. Adding to that, this also includes assessing their effectiveness in reducing carbon emissions, ensuring environmental sustainability, and fostering long-term socio-economic development. The absence of such a system undermines the ability to make informed decisions, identify areas for improvement, and demonstrate the overall initiatives for success.

### 3.6.2 Lack of Transparency in the Carbon Credit Pricing

The audit noted that there was uncertainty in the pricing of the carbon credits. The review of project reports from managing authorities in Tanganyika, Mbulu, and Kiteto revealed that while the volume of carbon credits generated by the projects was documented, the challenge was verifying the actual market price of the carbon credits. This was contrary to Para 5 Appendix 1 (k) of the National Carbon Trading Guidelines, 2022, which requires the VPO to oversee the implementation of the cost and benefit-sharing scheme.

Moreover, the audit did not find supporting documents, such as receipts, cheques, payment vouchers, bank statements, Purchase Orders (POs), invoices, or related records, to provide clear and verifiable information on the actual price of each carbon credit traded. The proponent did not disclose the identity of the buyer (client) of the credits. This suggests that the precise price of the carbon credits, which generated TZS 36 billion from January 2023 to July 2024, remains undisclosed.

This means that, proponents who engaged in carbon trading across all visited councils did not implement the carbon trade projects in a transparent manner, contrary to Regulation 43 (1) and (2) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) which stipulates that the proponents undertaking carbon trading projects in the country must provide transparent information, including revenues from the sold-out carbon credits.

For example, a letter with Ref. No. KTVC/F.30/26/30, dated 4 October 2022, was written by the DED – Tanganyika DC requesting evidence on sales and prices of carbon credits undertaken by Carbon Tanzania Limited, the proponent undertaking carbon trade at the Ntakata Forest Reserve in Tanganyika DC. However, the response letter from Carbon Tanzania Limited to the DED dated 19 September 2022 did not provide the details requested. This suggests that the project proponent predominantly managed the carbon trade, as the response lacked specific details about the clients who purchased the credits. This was noted when the audit team visited the three carbon trade projects.

The lack of transparency resulted from the following facts:

**(a) Lack of Guidance on Carbon Crediting Mechanism**

The team noted the absence of a crediting mechanism that promotes investment as required under Regulation 9 (1, c) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023). This has accelerated the risk of pricing carbon credits at non-realistic market value due to a lack of transparency during the trading of carbon credits by developers.

**(b) Overreliance on Project Developers to Bring Supply to the Carbon Market**

The audit noted that there was a high reliance on proponents who dictated the availability and location of carbon markets and the price of carbon credits. Therefore, the trading of carbon credits is often not transparent, and there is a risk of under-pricing since the proponent does not disclose the price of carbon credits.

Without clear transparency in the carbon credit pricing, holding the project proponent accountable for the revenues generated from carbon credit sales becomes difficult. Moreover, the absence of supporting records, such as receipts or bank statements, undermines the ability to verify the actual financial transactions, making it challenging to track the flow of funds and ensure that revenues are being properly allocated and used for intended purposes.

### 3.6.3 VPO did not Adequately Oversee the Costs and Benefits - Sharing Scheme of the Carbon Trade Projects

Based on the review of the project performance reports from the visited managing authorities (local communities owning the forest reserves and WMAs) and LGAs, the audit noted that the VPO did not oversee the cost-benefit sharing of the carbon trade projects in the country. This is contrary to Para 5 Appendix 1 (k) of the National Carbon Trading Guidelines, 2022, which requires the VPO to oversee the implementation of the cost and benefit-sharing scheme.

This was evidenced by the lack of detailed documentation and tracking mechanisms for monitoring the financial outcomes of these projects. This inability to oversee the actual cost-benefit analyses has hindered the understanding of these projects' revenue and economic impact, raising concerns about the transparency and accountability of the cost and benefit-sharing arrangements in the carbon trade projects.

As a result, the audit noted the following shortfalls related to cost sharing:

***Delays in Distributing Benefits to Managing Authorities***

Delays in the distribution of benefits to managing authorities hindered the timely realization of the project-related outcomes. For instance, Tanganyika District Council experienced a delay of over two months in receiving revenue from carbon trade phases 6 and 7, as highlighted in the reminder letter Ref. No. AB.68/82/01/140, dated 27January 2023.

Furthermore, the delays did not account for fluctuations in the dollar exchange rate, potentially affecting the total revenues from carbon credit sales. Consequently, managing authorities were left waiting for the revenue breakdown provided in the proponents' reports to proceed with benefit-sharing, which undermined their ability to actively participate in the cost-sharing discussions. The situation was caused by:

### *(a) Ineffective Institutional Coordination and Capacity*

The audit noted that the VPO, through the NCMC, managed to coordinate the review and scrutiny of concept notes and project documents through the National Carbon Projects Assessment Technical Committee. However, there was no evidence of comprehensive coordination efforts regarding the broader coordination of carbon trade activities, sectoral coordination, or stakeholder mobilization. This is contrary to Regulation 9(1)(b) of Environmental Management (Control and Management of Carbon Trading Mechanism) (Amendment) Regulations, 2023, which requires the VPO to coordinate climate change-related matters across the country. On the other hand, Regulation 10(c) mandates the VPO to enhance sectoral coordination and stakeholder mobilization to effectively control and manage carbon trading activities.

Although the National Carbon Projects Assessment Technical Committee involved other stakeholders during the review of carbon trading project documents, the absence of clear processes for involving and engaging stakeholders in other activities was vivid. This lack of comprehensive coordination caused broader coordination efforts to be overlooked. Consequently, the country's ability to address climate change effectively was reduced, which eventually delayed progress toward realising the national goals.

### *(b) Limited Awareness and Capacity Building for Stakeholders*

Public participation and awareness initiatives related to carbon trading, as mandated by Regulation 10(d), were not undertaken. The need for awareness activities was emphasized in agenda item 6 of the minutes from the first meeting of the National Carbon Projects Assessment Technical Committee, held at NCMC's office at SUA Morogoro on 17-18July 2023; awareness was planned to enhance the committee members' understanding, particularly on agreements and standards. However, no awareness initiatives had been carried out by the VPO through NCMC until December 2024.

The lack of awareness initiatives was attributed to inadequate plans and strategies within the VPO for coordinating these activities. The lack of capacity among those responsible for coordination has negatively affected the ability to manage and coordinate the actors and processes involved in carbon trade. This deficiency could lead to missed opportunities for climate finance and impede progress in reducing carbon emissions.

#### 3.6.4 Lack of Accountability in Revenue Utilization

The review of the plans and budgets[18] from the visited LGAs in Mbulu, Kiteto, and Tanganyika District Councils revealed that only Mbulu DC had ensured protection of the revenue accrued from carbon trading within their jurisdiction. This means that, revenues accrued from the carbon trading were not effectively directed towards climate-related projects or initiatives as intended.

Interviews with officials from these LGAs revealed that the revenue was treated as a general source of income and redirected to other activities. This practice contradicts paragraph 4.2.1.1 of the National Carbon Trading Guidelines, 2022, which emphasizes that revenue from carbon credits should be allocated while prioritising forest conservation activities at the village or district levels.



This issue was further attributed to the absence of clear guidance from the VPO on the utilisation of revenue, increasing the risk of funds being diverted to activities unrelated to the management of carbon trade projects. Consequently, many LGAs were unable to conduct sufficient inspections to ensure the proper conservation of forestry resources, as the funds had been reallocated to other purposes. This could ultimately lead to the increased risk of degradation of forest resources or maladaptation to climate change impacts, thus devaluation of the carbon credits at the international market.

[18] *Mapendekezo ya Mpango na Bajeti ya Halmashauri kwa Mwaka wa Fedha 2024/25 (Halmashauri ya Wilaya ya Tanganyika, Mbulu na Kiteto)*

### 3.6.5 The VPO did not Coordinate the Project Proponents' fulfilment of the Corporate Social Responsibility in the Carbon Trade Projects

The review of the implementation reports for the Ntakata Mountains REDD Project, Yaeda-Eyasi REDD Project, and Makame Savannah REDD Project revealed that the project proponent did not contribute to the implementation of social corporate responsibilities activities contrary to Para 4.1.4 of the National Carbon Trading Guidelines, 2022 which highlights that carbon trading projects should clearly clarify on how social corporate responsibilities will be fulfilled to support the local community's development activities and welfare.

The benefits associated with biodiversity conservation, poverty alleviation, community empowerment, and other social and environmental co-benefits Carbon projects were not covered by the developers as part of commitments to give back to the community.

This is despite the fact that the managing authorities were implementing development activities from their shares, such as the construction of dormitories, classrooms, and healthcare centres. For example, during the site visit to the Ntakata Mountains carbon trade project in Tanganyika DC, the audit team observed construction projects, such as classrooms and health centres at Mwenga and Kagunga villages **(Photos 3.1** and **3.2)**, which were fully funded by the managing authority.




***Photo 3.1:*** Constructed Classroom at Mwese Village, Photo taken by Auditors during a Site Visit at Mwesse Village on 19 September 2024


***Photo 3.2*****:** Constructed Health Centre at Kagunga Village, Photo taken by Auditors during a Site Visit at Kagunga Village on 19 September 2024

The non-contribution of proponents in the implementation of Corporate Social Responsibility (CSR) activities was partly linked to a lack of plans to facilitate CSR initiatives. It was further noted that the carbon trade contracts between the project proponents and managing authorities did not include provisions for CSR commitments in the operational areas.

This omission was attributed to the VPO's inadequate awareness-raising on the matter, as required by Appendix 1(j) of the National Carbon Trading Guidelines, 2022, which mandates the VPO to conduct capacity building and raise awareness on carbon trading. However, the VPO did not offer guidance on compliance with the fulfilment of corporate social responsibility in carbon trade projects.

The absence of Corporate Social Responsibility (CSR) initiatives in these projects could lead to missed opportunities to improve the socio-economic welfare of the local communities, limiting potential benefits such as job creation, infrastructure development, and community empowerment.

# CHAPTER FOUR

# AUDIT CONCLUSION

## 4.1 Introduction

This chapter draws the conclusions of the audit based on the findings presented in the previous chapter. The basis for the conclusions has been provided in relation to the main and specific objectives of the audit, as presented in chapter one of this report. This section is divided into two main sections, namely: general and specific audit conclusions.

## 4.2 General Conclusion

The audit recognizes that Tanzania, through VPO, participates in carbon trade to promote sustainable development and support global emission reduction efforts. It has distinguished itself in Africa by establishing comprehensive regulations and guidelines for managing carbon trade. The National Carbon Monitoring Centre (NCMC) plays a pivotal role in this effort, providing a framework along with cost and benefit-sharing arrangements for carbon trading. The NCMC also plays a key role in monitoring carbon emissions, verifying carbon credits, ensuring adherence to carbon trading regulations, and supporting both national and international efforts to reduce greenhouse gas emissions.

However, it is concluded that the Vice President's Office (VPO) does not effectively manage carbon trade activities to reduce greenhouse gas emissions and stimulate economic growth through revenues generated from carbon credits.

Outdated GHG baseline data hamper the nation's carbon trading efforts. The Vice President's Office (VPO) does not effectively facilitate the initiation and planning of carbon trading projects, with issues like delayed review and scrutinization of planning documents for carbon trade and inadequate verification of proponent qualifications. Also, the VPO does not properly guide and coordinate the management of contractual agreements and the involvement of legal experts and the Office of the Attorney General in vetting the carbon trade contractual agreements. Furthermore, the implementation of carbon trade projects is not well coordinated and is characterized by inadequate monitoring and evaluation, lack of transparency in the pricing of carbon credits, and inadequate cost benefit-sharing, further undermining accountability and economic gains, limiting full benefits in the carbon trading activities.

## 4.3 Specific Conclusions

### 4.3.1 Inadequate Development and Dissemination of Key Information, such as Baseline Data for Carbon Trade

The VPO, through NCMC, has not adequately developed and disseminated baseline information for carbon trading activities. National-level baseline data, such as the Greenhouse Gas (GHG) Inventory and the Forest Reference Emission Level (FREL), have not been updated for up to 10 years, with the GHG Inventory having been last submitted to the UNFCCC almost a decade ago. This outdated data impairs the country's ability to participate in carbon trading and accurately track progress on emissions reductions.

Moreover, the existing GHG Inventory does not comprehensively cover all sectors, limiting the accuracy of emissions reporting and weakening Tanzania's ability to meet international obligations under the UNFCCC. The lack of national capacity to independently update these inventories and cover all sectors has led to overreliance on development partners to undertake this activity, further delaying the necessary updates.

There were also challenges in validating and verifying baseline data, as the National Carbon Monitoring Centre (NCMC) faces resource constraints, including inadequate equipment and technology such as remote sensing technology, satellite imagery, and carbon estimation software tools for accurate measurement and reporting. The centre kept a high reliance on international standards, such as Verra, and thus lacked transparency on the usage of carbon credits and limited access to information on carbon trading activities.

### 4.3.2 Ineffective Management of Initiation and Planning of the Carbon Trade

The audit noted that the VPO's oversight of carbon trading project initiation and planning was ineffective. The Audit also noted the inadequate review of the expertise and financial capacity of project proponents, which weakened the assurance that only qualified proponents were involved in carbon trading projects. On the other hand, the National Carbon Projects Assessment Technical Committee did not hold meetings in a timely manner, delaying the review and approval of projects.

Furthermore, the VPO's lack of proper coordination of the functions of the National Carbon Projects Assessment Technical Committee left gaps in the project management process. As a result, there was non-compliance with carbon trading guidelines and regulations, compromising the legal validity of contracts and reducing the effectiveness of the carbon trading mechanisms, specifically in ensuring proper allocation of funds for progressive forest conservation of the carbon trade activities.

### 4.3.3 Inadequate Guidance on the Management of Contractual Agreements between Parties Involved in Carbon Trade



The VPO does not adequately provide guidance on the management of the contractual agreements for carbon trading projects. These deficiencies have led each of the managing authorities and Local Government Authorities to have their own unique terms and conditions of contracts. Further to that, there was inadequate guidance for involving the necessary staff in the preparation and signing of contracts. The VPO did not coordinate with the Office of the Attorney General for the legal vetting of contracts in order to ensure that the agreements considered the inclusion of the provisions to enhance forestry conservation as part of supporting sustainable development.

### 4.3.4 Inadequate Management of the Implementation of Carbon Trade Activities

The Vice President's Office (VPO) has not adequately managed the implementation of carbon trade activities. The absence of periodic monitoring and evaluation of these projects limits the ability to assess their progress and effectiveness. Additionally, there is a significant lack of transparency in the pricing of carbon credits, which undermines confidence in the carbon market. The VPO does not provide sufficient oversight of the costs and benefits-sharing scheme, which is essential for ensuring that the financial rewards from carbon trading are fairly distributed.

Furthermore, there is no clear accountability for how revenue generated from carbon trade activities is being utilized, leading to concerns about the mismanagement of funds. Lastly, the VPO has not ensured that project proponents fulfil their Corporate Social Responsibility (CSR) obligations, which would support local communities and environmental sustainability. These gaps in the management and oversight initiatives jeopardize the success and long-term sustainability of carbon trade activities, potentially limiting their environmental and economic benefits.

## CHAPTER FIVE

## AUDIT RECOMMENDATIONS

### 5.1 Introduction

This chapter provides recommendations regarding measures to enhance the management of carbon trade in the country. The audit findings and conclusions indicate areas that need corrective actions for the effective undertaking of carbon trade projects.

The Vice President's Office, through the National Carbon Monitoring Centre, is required to rectify the noted challenges and improve the level and extent of implementation of carbon trade projects in the country. This will enhance the country's contribution toward greenhouse gas emission reduction efforts, thereby minimizing climate vulnerability while ensuring environmental conservation and sustainable socio-economic development.

### 5.2 Recommendations to the Audited Entities

#### 5.2.1 Development and Dissemination of Baseline Data



To ensure adequate development and dissemination of baseline data for carbon trade, the Vice President's Office is advised to:

(i) Establish and oversee mechanisms for collecting, analysing, reporting and disseminating baseline data;

(ii) Develop measures for validation and verification of baseline data; and

(iii) Strengthen the institutional framework for the carbon sector by elevating NCMC to a fully-fledged institution.

#### 5.2.2 Management of Initiation and Planning of the Carbon Trade

To enhance effective management of the initiation and planning of the carbon trade, the Vice President's Office is advised to:

(i) Establish and oversee means to enable timely review and scrutinisation of the carbon trade activities, including project proponents' expertise and financial capacity.

### 5.2.3 Management of Contractual Agreements between Parties Involved in the Carbon Trade

To facilitate the effectiveness of the contractual agreements between parties involved in carbon trade, the Vice President's Office is supposed to:

(i) Establish and oversee procedure/guidance to ensure standardized procedures of contractual agreements for carbon trade projects;

(ii) Prepare a template for carbon trade contracts that includes all crucial aspects for the management of carbon trade projects; and

(iii) Ensure that the office of the Attorney General is involved in vetting the carbon trade contractual agreements.

### 5.2.4 Management of the Implementation of Carbon Trade

To enable adequate management of the implementation of carbon trade, the Vice President's Office is adviced to:

(i) Establish and implement systems to enhance coordination, regular monitoring, and evaluation of carbon trading projects, ensuring transparency in all processes and procedures;

(ii) Develop and operationalize the national carbon crediting mechanism to ensure transparency in the pricing of carbon credits; and

(iii) Establish a capacity-building program for matters related to carbon trading activities in the country.

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# APPENDICES

## Appendix 1: Response from the Audited Entity

This part provides details on the overall comments from the audited entity and the responses to the comments, as well as actions to be taken and implementation timelines for each of the issued recommendations.

**Specific Comments**

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| *To ensure adequate development and dissemination of baseline data for carbon trade, the Vice President's Office is advised to:* | | | | |
| 1. | Establish and oversee mechanisms for collecting, analysing, reporting and disseminating baseline data. | The Audit recommendation is accepted. However, the MRV system is available at the NCMC despite challenges, including technological, financial, and technical challenges. The MRV system provides for data collection from data providers, e.g., MDAs, analysis using IPCC GHG inventory software and reporting through VPO. The project generates the baseline data. In addition, other information and reports formulated and regularly disseminated, as appropriate once, are available through workshops, retreats and VPO/NCMC | The MRV system will be periodically revised to comply with international standards depending on resource availability from domestic and external sources. | 2026/27 |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| | | websites (Eg: -During Development of FREL) | | |
| 2. | Strengthen the institutional framework for the carbon sector by elevating NCMC to a fully-fledged institution. | Recommendation accepted. The VPO, through the government system is in the process of establishing NCMC by legally recognizing NCMC in EMA | Proposal for legally establishing of National Carbon Monitoring Centre has been prepared | 2027/28 |
| 3. | Develop measures for validation and verification of baseline data. | The Audit recommendation is accepted.<br><br>Validation and verification will continue being undertaken by independent accredited international entities to ensure the acceptability of reports by the international community and the market in question.<br><br>In addition, the project baseline will continue being developed in accordance with specific project standards and requirements. | The NCMC will continue to collaborate with existing international entities and Development Partners to support the development of measures for validating and verifying baseline data. | 2026/27 |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| | | In addition, VPO will continue providing national information on GHG through reports such as NDC, National GHG inventory, and Biennial Technical Reports (BTRs). | | |
| ***To enhance effective management of the initiation and planning of the carbon trade, the Vice President's Office is argued to:*** | | | | |
| 1. | Establish and oversee means to enable timely review and scrutinisation of the Carbon Trade activities, including the expertise and financial capacity of project proponents. | The Audit recommendation is accepted.<br><br>However, the National Assessment Technical Committee conducted a review of the Carbon project after they had fulfilled all requirements.<br><br>Review of the project is done on a demand basis.<br><br>Division of Environment develops an action plan every year for the implementation of various activities such as carbon trading. In 2022, it developed the National Carbon Trading Regulations which was amended in 2023 to integrate Article 6 of the Paris Agreement. Technical | The VPO will continue to enhance technical and financial capacity by collaborating with development partners to effectively manage carbon trading activities. | 2024/25 |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
| --- | --- | --- | --- | --- |
| | | capacity building on the existing expertise will be enhanced despite financial challenges. Additionally, Carbon Trading Regulations provide for the establishment of a National Carbon Projects Assessment Committee that conduct periodic meetings to asses submitted projects on-demand basis.<br><br>However, it should be noted that project concepts are only evaluated by the National Carbon Assessment Technical Committee once the project proponent pays registration fees. The process of verifying the capacity of the project proponent starts from the first stage when they submit the project idea note (PIN), which is done by the secretariat (NCMC & VPO). No project will go to the National Carbon Assessment Technical Committee meeting without verification. For | | |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| | | projects to be given a letter of no Objection to develop a concept note, their feasibility reports have been reviewed by the secretariate, which will then report to the technical committee for further review. | | |
| ***To facilitate the effectiveness of the contractual agreements between parties involved in carbon trade, the Vice President's Office is supposed to:*** | | | | |
| 1. | Establish and oversee procedure/guidance to ensure standardized procedures of contractual agreements for carbon trade. | The VPO/NCMC has developed National Guidelines for Carbon Trading (2022) and National Carbon Trading Regulations (2022 amended in 2023). These instruments provide procedure/guidance to ensure standardized procedures of contractual agreements. The Guidelines stipulate the key elements to be included in a contractual agreement. | The VPO will continue to enhance regulatory measures to ensure standardized procedures of contractual agreements. | 2024/25 |
| 2. | Prepare a template for carbon trade contracts that includes all crucial aspects for the management of carbon trade projects. | The draft template for carbon trade contracts that includes all crucial aspects for the management of carbon trade projects has been prepared and will be adapted in the | The VPO will continue to enhance carbon trading tools, including templates for carbon | 2025/26 |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| | | upcoming financial year. In addition, the regulations highlight key elements to be included in the contract so as to assist the project during the development and signing of contracts. | trade contracts. | |
| 3. | Ensure that the office of the Attorney General is involved in vetting the carbon trade contractual agreements. | The Office of the Attorney General is always involved in vetting the carbon trade contractual agreements, including preparation of the Carbon Trading Regulations (2022 and amended in 2023) | The VPO will continue to involve the Office of the Attorney General in vetting the carbon trade Contractual instruments. | 2024/25 |
| ***To enable adequate management of the implementation of carbon trade, the Vice President's Office is argued to:*** | | | | |
| 1. | Establish and implement systems to enhance coordination, regular monitoring, and evaluation of carbon trading projects, ensuring transparency in all processes and procedures. | The system to enhance coordination, regular monitoring and evaluation of carbon trading projects has been established and implemented, notably the Online National Carbon Registry and an Integrated NDC- MRV System. Additionally, The Carbon Trading Regulations 2022, amended in 2023, has established a National Carbon Project Technical Assessment Committee to ensure | The VPO will continue to enhance coordination, regular monitoring and carbon trading projects. | Continuous |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| | | effective coordination and transparency.<br><br>Furthermore, VPO has established a National Carbon Trade Committee to assist in monitoring projects. | | |
| 2. | Develop and operationalize the national carbon crediting mechanism to ensure transparency in the pricing of carbon credits. | The VPO/NCMC has developed The Carbon Trading Regulations 2022 and amended them in 2023, which provide a crediting mechanism under Articles 6.2 & 6.4 of the Paris Agreement.<br><br>NOTE that article 6.4 of the Paris Agreement is not about setting domestic and international carbon trading guidelines. Article 6.4 standard methodology guidelines and mechanisms are handled by the UNFCCC and should be agreed among Parties. In 2024, during COP 29, parties agreed on methodology frameworks after several years of negotiations. | The VPO will continue to align with the existing international crediting mechanisms wherever needs arise to comply with international standards. | 2024/25 |
| 3. | Establish a capacity-building program for matters related to carbon trading | The NCMC has a Capacity Building Programme on matters related to carbon | The VPO/NCMC will continue to build | 2025/26 |

| SN | Recommendation | Comment(s) | Actions to be Taken | Timeline |
|---|---|---|---|---|
| | activities in the country. | trading, including GHG inventories and IPCC GHG inventory software. Further, VPO and NCMC conduct periodic awareness training on Carbon Trading and GHG inventories. | capacity to experts from Government, Departments and Agents, communities and Development Partners on carbon trading | |

## Appendix 2: Audit Questions and Sub-Questions

This part contains the main audit and sub-audit questions used in this report.

| | |
|---|---|
| Audit Question 1 | To what extent does the VPO through NCMC ensure adequate tapping of carbon trading opportunities? |
| Sub-Question 1.1 | To what extent has the regulatory framework aligned with the international agreements on carbon trade? |
| Sub-Question 1.2 | To what extent is the country participating in the Regional and International Carbon Market? |
| Sub-Question 1.3 | Are the carbon trading potentials adequately utilized? |
| Sub-Question 1.4 | To what extent are the carbon trade projects implemented? |
| Sub-Question 1.5 | Is there adequate public and private engagement in carbon trade? |
| Audit Question 2 | Does the VPO through NCMC adequately develop and disseminate all key information, including baseline data for carbon trade? |
| Sub-Question 2.1 | Does the VPO ensure the development and updating of greenhouse gas baseline data? |
| Sub-Question 2.2 | Does the VPO, through NCMC, report and disseminate baseline data? |
| Sub-Question 2.3 | Does the VPO through NCMC regularly validate and verify the carbon credits to ensure their accuracy and validity? |
| Audit Question 3 | Has the VPO, through NCMC, effectively managed the initiation and planning of the country's carbon trade? |
| Sub-Question 3.1 | Does the VPO through NCMC facilitate and coordinate the timely engagement of the project proponents? |
| Sub-Question 3.2 | Does the VPO, through NCMC, verify the project proponent's capacity for carbon trade? |
| Sub-Question 3.3 | Has the VPO through NCMC adequately reviewed and scrutinised the carbon trade project initiation documents, including the feasibility study (project concept notes, project documents and environmental and social impact assessments)? |
| Sub-Question 3.4 | Does the VPO, through NCMC, properly coordinate the functions of the National Carbon Trade Assessment Technical Committee? |
| Audit Question 4 | Has the VPO, through NCMC, adequately guided the management of the contractual agreements between parties involved in the carbon trade project? |
| Sub-Question 4.1 | Has the VPO adequately reviewed the contractual agreements between parties involved in the carbon trade project? |
| Sub-Question 4.2 | Has the VPO guided the involvement of competent staff during the preparation and signing of contractual agreements? |

| | |
|---|---|
| Sub-Question 4.3 | Has the VPO coordinated and monitored the vetting of contractual agreements between parties involved in the carbon trade project? |
| Sub-Question 4.4 | Does the VPO ensure the contractual agreement enhances forestry conservation and sustainable development? |
| Audit Question 5 | Has the VPO, through NCMC, adequately managed the implementation of carbon trade? |
| Sub-Question 5.1 | Does the VPO, through NCMC, conduct periodic monitoring and evaluation of carbon trade? |
| Sub-Question 5.2 | Does the VPO through NCMC ensure transparency in the carbon credit pricing? |
| Sub-Question 5.3 | Does the VPO, through NCMC, oversee the implementation of the costs and benefits of sharing carbon in the trade? |
| Sub-Question 5.4 | Does the VPO through NCMC ensure accountability on revenue utilization? |
| Sub-Question 5.5 | Has the VPO, through NCMC, ensured that the project proponent fulfils corporate social responsibility obligations while implementing carbon trade projects? |

## Appendix 3: List of Officials Interviewed and Reasons for the Interviewing them

This part provides a detailed list of individuals and entities interviewed during the main study and the reasons for interviewing them.

| Entity | Official Interviewed | Reasons |
|---|---|---|
| The Vice President Office - Division of Environment (VPO-DoE) | • Director of Legal Services Unit<br>• Director of Policy and Planning Division<br>• Director of Monitoring and Evaluation Unit<br>• Carbon Trade Focal Persons | To obtain overall information about the register of all carbon trading projects, key information on carbon trading, capacity building, and awareness raising, as well as monitoring the performance of carbon trade in the country |
| Ministry of Natural Resource and Tourism (MNRT) | • Carbon Trade Focal Persons<br>• Other officials responsible for carbon trade | To obtain overall information about sectoral technical, administrative and legal support on the management of carbon trade under the natural resources and tourism sector |
| Ministry of Energy (MoE) | • Carbon Trade Focal Persons<br>• Other officials responsible for carbon trade | To obtain overall information about sectoral technical, administrative and legal support on the management of carbon trade in the sector |
| President's Office-Regional Administration and Local Government (PO-RALG) | • Carbon Trade Focal Persons<br>• Other officials responsible for carbon trade | To obtain comprehensive information on directives regarding revenue accruals and expenditures, agreements or memorandums of understanding, capacity-building efforts, and performance monitoring in carbon trade at the LGAs level. |
| National Carbon Trade Commission (NCMC) | • National Carbon Monitoring Centre Coordinator<br>• Safeguard Information System Officer | • To obtain information regarding the development of baseline information, initiation and planning of carbon trade projects, |

| Entity | Official Interviewed | Reasons |
|---|---|---|
| | • Biodiversity Conservationist | contract management and overall implementation of these projects in Tanzania.<br>• To obtain comprehensive information on the key information related to the baseline data consent data, concept note, project documents and contract information. |
| Tanzania Forest Services Agency (TFS) | • Chairman of the carbon trade desk<br>• Members of the carbon trade desk<br>• Head of Unit-Natural Forest Unit | • To obtain information regarding the management of the carbon trading project<br>• To gather comprehensive information on implemented projects, property ownership involved in carbon trading, the preparation, signing, and implementation of agreements related to carbon trading projects, and the engagement of proponents. |
| Tanzania Wildlife Management Authority (TAWA) | • Chairman of the carbon trade desk<br>• Members of the carbon trade desk<br>• Head of Unit-Natural Forest Unit | • To gather comprehensive information on implemented projects, property ownership involved in carbon trading, the preparation, signing, and implementation of agreements related to carbon trading projects, and the engagement of proponents. |
| Regional Secretariats (RSs) | • Coordinator of Carbon Trade<br>• Legal Officer<br>• Assistant<br>• Director – Planning | • To gather comprehensive information on implemented projects, the preparation, signing, and implementation of carbon trading projects' agreements, and the proponents' engagement. |

| Entity | Official Interviewed | Reasons |
| --- | --- | --- |
| Local Government Authorities (LGAs) | • Legal Officers<br>• Head of Unit-Planning and Budgeting<br>• Environmental Officers (LGAs) | • To gather comprehensive information on implemented projects, property ownership involved in carbon trading, the preparation, signing, and implementation of agreements related to carbon trading projects, and the engagement of proponents. |

## Appendix 4: List of Documents Reviewed and Reasons for the Reviewing them

This part contains a list of documents reviewed from VPO, NCMC and the managing authorities and reasons for the review.

| Category of Documents | Title of the Document | Reasons for reviewing |
|---|---|---|
| Baseline Scenario | • Baseline Data<br>• Project Documents (PDD and Concept Note)<br>• GHG Inventory | • Check the coordination of the national GHG inventory and national forest inventories.<br>• To Check whether the project documents include the baseline data |
| Project Initiation and Planning Document | • Registration certificates<br>• Concept note<br>• Project Documents<br>• Minutes from the Carbon Trade National Technical Committee | • Assess the registration status of the proponent with the relevant authorities.<br>• Check whether managing authorities verified the proponents<br>• To assess the adequacy of planning, appraisal and feasibility study of the project prior to its implementation |
| Documents related to the Contract Agreement | • Appointment letters of the Evaluation Committee and negotiation Team<br>• Vetting of draft contract documents<br>• Signed Contracts Document | • To assess the procurement processes and contract awarding processes used<br>• To determine/know terms in the contract relating to payments, damages, delays of payments and claims, etc. |
| Documents related to Project Implementation | Project Implementation Reports | To check if it is in line in case of variation in time of project implementation or changed scope |
| | | To check implementation and challenges in project implementation |
| | | To check the total amount that has been paid |

| Category of Documents | Title of the Document | Reasons for reviewing |
|---|---|---|
| Monitoring Reports | • Monitoring Reports<br>• Action Plans Reports | To understand the current status and challenges as well as to analyse the actions taken by the responsible actors |

## Appendix 5: Audit Criteria

The following assessment criteria were used to evaluate how effectively the audited entities and sampled stakeholders managed the carbon trade in the country.

### (a) Development and Dissemination of Baseline Data

Regulation 9(1)(h) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) calls upon the provision of key information (baseline scenario) to the proponent in carbon trading project by VPO who is the Designated National Authority or National Focal Point or National Authority.

Also, Regulation 27(2)(b) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) requires the managing authority and proponents to include a detailed description of the baseline and monitoring methodology in their documents.

Furthermore, according to the core functions outlined on their official website, the NCMC is responsible for managing, developing, and sustaining the operations of the national GHG inventory and REDD+ MRV systems. They also facilitate the validation of results for the UNFCCC and the international community in collaboration with the VPO.

### (b) Initiation and Planning of the Carbon Trade Projects

Para 3.1.1 of the National Carbon Trading Guidelines, 2022, outlines that project proponents must comply with several key requirements: possess relevant carbon trading expertise, be registered with the appropriate authorities, demonstrate financial capacity to invest in carbon trading projects and adhere to all applicable legal requirements.

Additionally, para 3.1.3 of the National Carbon Trading Guidelines, 2022, insists that carbon trading projects should undergo environmental and social impact assessments in accordance with the Environmental Impact Assessment Regulations and any other relevant legislation.

Also, Regulations 27 and 28 of the National Carbon Trading Guidelines, 2022 require the project proponent to develop a Project Concept Note and a Project Document in collaboration with the Managing Authority or project partners.

Moreover, Regulation (3) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), insists that the developed Project Concept Note shall be submitted to the Designated National Authority or National Focal Point for review and scrutiny.

Furthermore, Regulation 12 (a) and (b) of the National Carbon Trading Guidelines October 2022 requires the National Carbon Projects Assessment Technical Committee to scrutinise the concept note and Project Document referred to it and provide recommendations to the Designated National Authority or National Focal Point.

Para 3.2.1 of the National Carbon Trading Guidelines, 2022, outlines the application procedures and insists the Appropriate Authority, in this case, the VPO through NCMC, review and scrutinize the Project Document within 30 days from the date of receipt of the project document.



**(c) Management of Contract Agreements of Carbon Trade Project**

Para 3.4 of the National Carbon Trading Guidelines, 2022, directs that parties intending to collaborate on carbon trading projects shall enter into contractual agreements.

Regulations 18(c) and 21(a) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), require the Managing Authority or Village Government/Mtaa to prepare, sign, and implement contracts related to carbon trading projects.

Regulation 35 of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), indicates the project proponent needs to fulfil corporate social responsibility in the area of operation.

Regulation 29 (1) of Environmental Management (Control and Management of Carbon Trading) (Amendment) Regulations, 2023 states persons intending to collaborate on a carbon trading project shall enter into contractual agreements.

**(d) Implementation of Carbon Trade Projects**

Regulation 42 of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), requires the Designated National Authority or National Focal Point to coordinate periodic monitoring and evaluation of the registered carbon trading projects to measure and assess the success and performance of carbon trading projects.

Additionally, para 3.2.1(5)(a) of the National Carbon Trading Guidelines, 2022, requires the VPO to be notified about the commencement of the project.

Regulation 9(1)(j) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) indicates that, the functions of the Designated National Authority or National Focal Point National Authority shall include coordinating and conducting monitoring and evaluation of the registered carbon trading project.

Furthermore, Appendix 1 (k), related to the responsibility of the Designated National Authority and or National Focal point, includes overseeing the implementation of the costs and benefits sharing scheme.

Lastly, Regulation 19(1)(g) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023) requires the proponent, in collaboration with the relevant Government authority, Managing Authority or partner, to prepare and submit a progress report on the implementation of the carbon trading project.

Regulation 18(c) of the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 (as amended in 2023), requires the Managing Authority to prepare, sign and implement contracts related to carbon trading projects.

Regulation 42 of the Environmental Management (Control and Management of Carbon Trading Mechanism) (Amendment) Regulations, 2023, requires the VPO to conduct periodic monitoring and evaluation of registered carbon trading projects to measure and assess their success and performance. To achieve this, the VPO is expected to have established systems and processes to facilitate monitoring.

Appendix 1 (k) of the National Carbon Trading Guidelines, 2022, requires the VPO to oversee the implementation of the cost and benefit-sharing scheme.

Para 4.1.4 of the National Carbon Trading Guidelines, 2022, highlights that carbon trading projects that are not managed by communities are required to show explicitly how the local communities are going to be taken on board to participate and benefit from the project. Apart from community direct participation, the project should also clearly clarify how social corporate responsibilities consideration will be made to support the local community's development activities and welfare.

## Appendix 6: Status of Delay of Review and Scrutinization of Carbon Trade Projects

This part highlights delays in reviewing and scrutinizing project documents following their submission.

| S/N | Project name | Date of Application | Review Date | Number taken to review | Number of days Delayed (X-30) | Status |
|---|---|---|---|---|---|---|
| 1 | REDD+ Project in South-Western Tanzania | 24-Jan-23 | 17-Jul-23 | 174.00 | 144.00 | Out-of-planned days |
| 2 | Clean Cooking to Combat Climate Change in Tanzania | 25-Jan-23 | 17-Jul-23 | 173.00 | 143.00 | Out-of-planned days |
| 3 | Wami Mbiki REDD+ Project | 06-Mar-23 | 17-Jul-23 | 133.00 | 103.00 | Out-of-planned days |
| 4 | UpEnergy - Social and Climate Impact Programme - Tanzania | 13-Mar-23 | 17-Jul-23 | 126.00 | 96.00 | Out-of-planned days |
| 5 | Green World Solution Strategic Opportunity for Tanzania Mainland | 17-Mar-23 | 17-Jul-23 | 122.00 | 92.00 | Out-of-planned days |
| 6 | Nyerere National Park Voluntary Carbon Offset Project (NNPVCP) | 05-Apr-23 | 17-Jul-23 | 103.00 | 73.00 | Out-of-planned days |
| 7 | Selous Voluntary Carbon Offset Project (SVCP) | 05-Apr-23 | 17-Jul-23 | 103.00 | 73.00 | Out-of-planned days |
| 8 | Luganzo Carbon Project | 14-Apr-23 | 17-Jul-23 | 94.00 | 64.00 | Out-of-planned days |
| 9 | Carbon Credit Harvest and Purchase Programme | 15-May-23 | 17-Jul-23 | 63.00 | 33.00 | Out-of-planned days |
| 10 | 1 MW Luponde Hydro Project | 26-May-23 | 17-Jul-23 | 52.00 | 22.00 | Out-of-planned days |
| 11 | Mwenga Hydro Power Project | 26-May-23 | 17-Jul-23 | 52.00 | 22.00 | Out-of-planned days |
| 12 | Net Zero Africa - Manyara | 30-May-23 | 17-Jul-23 | 48.00 | 18.00 | Out-of-planned days |
| 13 | Ntakata Mountains REDD Project | 05-Jun-23 | 17-Jul-23 | 42.00 | 12.00 | Out-of-planned days |
| 14 | Yaenda - Eyasi REDD Project | 05-Jun-23 | 17-Jul-23 | 42.00 | 12.00 | Out-of-planned days |
| 15 | Makame Savannah REDD Project | 05-Jun-23 | 17-Jul-23 | 42.00 | 12.00 | Out-of-planned days |

| S/N | Project name | Date of Application | Review Date | Number taken to review | Number of days Delayed (X-30) | Status |
|---|---|---|---|---|---|---|
| 16 | TanzaBlue Project | 13-Jun-23 | 17-Jul-23 | 34.00 | 4.00 | Out-of-planned days |
| 17 | Udzungwa Corridor Reforestation | 13-Jun-23 | 17-Jul-23 | 34.00 | 4.00 | Out-of-planned days |
| 18 | Clean Cooking: Fuel switching to avoid deforestation | 16-Jun-23 | 17-Jul-23 | 31.00 | 1.00 | Out-of-planned days |
| 19 | Ruvuma Landscape REDD Project | 20-Jun-23 | 17-Jul-23 | 27.00 | -3.00 | Within 30 Days |
| 20 | Efficient and Clean Cooking for Households in Tanzania | 30-Jun-23 | 17-Jul-23 | 17.00 | -13.00 | Within 30 Days |
| 21 | Longido-Monduli Rangeland Carbon Project | 05-Jul-23 | 17-Jul-23 | 12.00 | -18.00 | Within 30 Days |
| 22 | Unite to Light & Solar Sister Solar Lamp Project - Tanzania | 20-Jul-23 | 20-Dec-23 | 153.00 | 123.00 | Out-of-planned days |
| 23 | Partnering for Biodiversity, prosperous, and resilient Tarangire Ecosystem Landscape | 24-Jul-23 | 20-Dec-23 | 149.00 | 119.00 | Out-of-planned days |
| 24 | EV Infrastructure and Conversion: Moving Tanzania Towards a Fully Renewable Energy Infrastructure | 27-Jul-23 | 20-Dec-23 | 146.00 | 116.00 | Out-of-planned days |
| 25 | Mikoko Carbon Sink (Micasi) | 02-Aug-23 | 20-Dec-23 | 140.00 | 110.00 | Out-of-planned days |
| 26 | Agroforestry Carbon Removal Project | 21-Aug-23 | 20-Dec-23 | 121.00 | 91.00 | Out-of-planned days |
| 27 | Carbon for Farmers Project | 28-Aug-23 | 20-Dec-23 | 114.00 | 84.00 | Out-of-planned days |
| 28 | GS PoA Safe Water Programme by Water Mission in Tanzania | 25-Sep-23 | 20-Dec-23 | 86.00 | 56.00 | Out-of-planned days |
| 29 | Tree Global: Afforestation, Reforestation and Revegetation (ARR) Project in the Biharamulo-Kahama Forest Reserve | 13-Oct-23 | 20-Dec-23 | 68.00 | 38.00 | Out-of-planned days |
| 30 | Village Climate Solutions | 17-Oct-23 | 20-Dec-23 | 64.00 | 34.00 | Out-of-planned days |

| S/N | Project name | Date of Application | Review Date | Number taken to review | Number of days Delayed (X-30) | Status |
|---|---|---|---|---|---|---|
| 31 | Sifuri Halisi | 23-Oct-23 | 20-Dec-23 | 58.00 | 28.00 | Out-of-planned days |
| 32 | TIST Tanzania | 27-Oct-23 | 20-Dec-23 | 54.00 | 24.00 | Out-of-planned days |
| 33 | Reforestation of Degraded Grasslands in Uchindile & Mapanda, Tanzania | 31-Oct-23 | 20-Dec-23 | 50.00 | 20.00 | Out-of-planned days |
| 34 | Green Tanzania Cookstove Programme | 15-Nov-23 | 20-Dec-23 | 35.00 | 5.00 | Out-of-planned days |
| 35 | Protection of Forest Reserves in Tanzania | 06-Dec-23 | 20-Dec-23 | 14.00 | -16.00 | Within 30 Days |
| 36 | Mabwepande Composting Facility for Market Waste | 08-Dec-23 | 20-Dec-23 | 12.00 | -18.00 | Within 30 Days |
| 37 | Smallholder Farmer Agroforestry, Southern Highlands | 20-Dec-23 | 20-Dec-23 | 0.00 | -30.00 | Within 30 Days |
| 38 | Clean Mining for Clean Energy | 20-Dec-23 | 20-Dec-23 | 0.00 | -30.00 | Within 30 Days |
| 39 | Installation of high-efficiency wood-burning cookstoves in Tanzania | 17-Jan-24 | 20-May-24 | 124.00 | 94.00 | Out-of-planned days |
| 40 | Mpingo Conservation Project | 21-Feb-24 | 20-May-24 | 89.00 | 59.00 | Out-of-planned days |
| 41 | Construction of Energy Efficient Biomass Cookstoves in Rukwa and Songwe Regions | 28-Feb-24 | 20-May-24 | 82.00 | 52.00 | Out-of-planned days |
| 42 | Organic Waste Composting in Tanzania | 28-Mar-24 | 20-May-24 | 53.00 | 23.00 | Out-of-planned days |
| 43 | Chobo Carbon Care: Cultivating Clean Energy | 08-May-24 | 20-May-24 | 12.00 | -18.00 | Within 30 Days |
| 44 | Tanzania Jiko Pamoja Improved Cookstove | 08-May-24 | 20-May-24 | 12.00 | -18.00 | Within 30 Days |
| 45 | Transformative Clean Cooking Project | 23-May-24 | - | - | - | Not Reviewed |
| 46 | Carbon Emission reduction in respect to Afforestation, potential Restoration, and Conservation | 24-May-24 | - | - | - | Not Reviewed |
| 47 | Ruangwa District Forest Reserves REDD+ Conservation Project | 27-May-24 | - | - | - | Not Reviewed |

| S/N | Project name | Date of Application | Review Date | Number taken to review | Number of days Delayed (X-30) | Status |
|---|---|---|---|---|---|---|
| 48 | Tanzania Carbon VCCT | 03-Jun-24 | - | - | - | Not Reviewed |
| 49 | BUYUNI REDD FARMS CARBON PROJECT | 18-Jun-24 | - | - | - | Not Reviewed |
| 50 | Clean Cooking for Communities in Kigoma | 25-Jun-24 | - | - | - | Not Reviewed |
| 51 | Kagera Basin Restoration Project (KABACORE) | 02-Jul-24 | - | - | - | Not Reviewed |
| 52 | Rubeho Mountains Carbon Project-ARR | 02-Aug-24 | - | - | - | Not Reviewed |
| 53 | Rubeho Mountains Carbon Project-REDD | 02-Aug-24 | - | - | - | Not Reviewed |
| 54 | MUHUWESI, NDECHELA AND MBAGALA FOREST RESERVES REDD+ | 06-Aug-24 | - | - | - | Not Reviewed |
| 55 | Enhancing Urban Mobility, Industrial Efficiency and Household Energy Solutions: Natural gas for transportation, power generation, and clean cooking in Dar es Salaam | 08-Aug-24 | - | - | - | Not Reviewed |

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