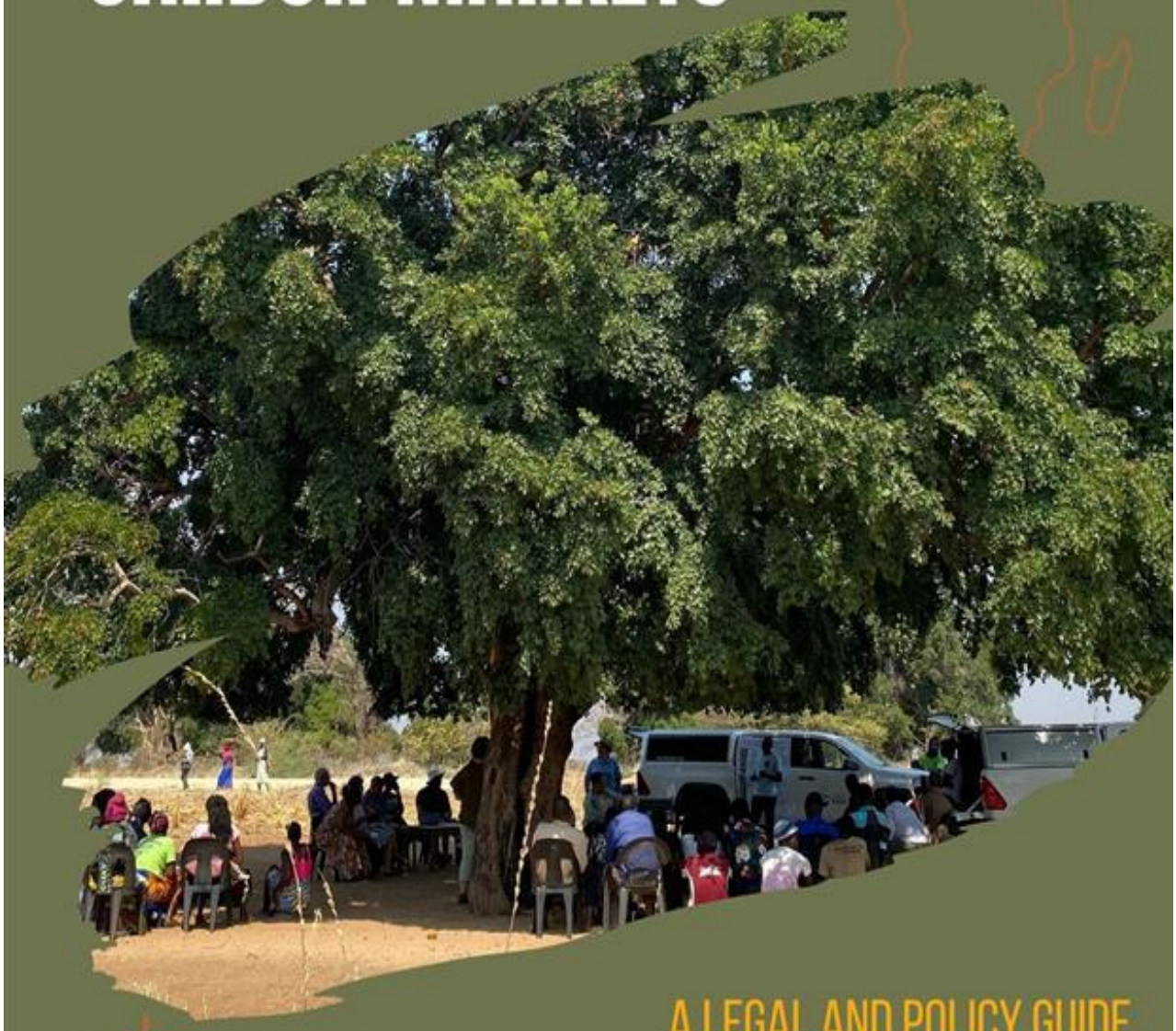
# A PATHWAY TOWARDS JUST CARBON MARKETS



## A LEGAL AND POLICY GUIDE FOR AFRICAN COUNTRIES

## Commissioned by the Environmental Lawyers Collective for Africa (Natural Justice):

## Prepared by the Centre for Environmental Justice for Africa

**Authors:**

Prof Roula Inglesi-Lotz: Professor, Department of Economics and Energy Economics Research Unit (EERU), University of Pretoria.

Dr Tiisetso John Rantlo: Lecturer and Director of the Extractive Industry Law in Africa Unit, Department of Public Law, University of Pretoria.

Dr Jessika Bohlmann: Research Specialist, Economic and Management Sciences Faculty; Energy Economics Research Unit (EERU), University of Pretoria

Ms Yasmine Luhandjula: Lecturer, Department of Public Law, University of Pretoria.

**Editors**

Nomasango Masiye-Moyo- Co-ordinator of the Environmental Lawyers Collective for Africa (Natural Justice)

Lucien Limacher – Head of programs (Natural Justice)

Claire Martins – Senior Communications Officer (Natural Justice)

Allan Basajjasubi - Senior Programme Officer in the Affirming Rights programmatic stream (Natural Justice)

Linda Sansisco - Head of Monitoring and Evaluation (Natural Justice)

Wandile Zondo- Researcher (Natural Justice)

# Executive Summary

The Emerging Regulatory Framework for Carbon Markets in Africa examines the evolving landscape of carbon markets across the continent, with a focus on both compliance and voluntary mechanisms. The study examines the historical development of carbon credits, their application in Africa, and the role of key stakeholders, including project developers, credit buyers and sellers, and verification bodies.

Carbon markets are growing across Africa, but without equity, transparency, and legal safeguards, they risk harming communities and undermining climate goals. Given this background, the objective of this report is to provide a critical analysis of current carbon credit frameworks in select African countries, advocating for stronger regulation, inclusive participation, and community-centred benefit-sharing.

A key challenge identified is the weak regulatory framework governing voluntary carbon markets in Africa, which can lead to potential human rights injustices and ethical concerns. The study highlights barriers to scaling carbon markets, including transparency issues, governance inefficiencies, and financial accessibility challenges. This highlights the strong need for legal reforms, litigation, capacity-building, and community education to ensure carbon markets promote justice rather than perpetuate exploitation.

Through a comparative analysis of regulatory approaches across selected African jurisdictions, including Tanzania, Zimbabwe, Zambia, Kenya, Uganda, Nigeria, Rwanda, and South Africa, the research evaluates existing institutional frameworks, dispute resolution mechanisms, and the integration of justice principles into regulatory policies.

The report also outlines persistent concerns regarding the equitable distribution of benefits and the protection of land rights, as well as community participation in these markets.

The report makes the argument that the weak regulatory frameworks in Africa necessitate the development of a more “just” regulatory framework. The report defines what a just regulatory framework entails and incorporates this definition into its assessment of existing regulatory frameworks across several African jurisdictions to determine whether they embody this “just element.”

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# ACRONYMS

| | |
|---|---|
| ACMI | Africa Carbon Markets Initiative |
| CDM | Clean Development Mechanism |
| CER | Certified Emission Reduction |
| DRC | Democratic Republic of Congo |
| ESG | Environmental, Social, and Governance |
| ETS | Emissions Trading System |
| GHG | Greenhouse Gas |
| IRP | Integrated Resource Plan |
| REED+ | Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks |
| tCO2e | Carbon dioxide equivalent |
| UNFCCC | United Nations Framework Convention on Climate Change |
| VCM | Voluntary Carbon Market |

# Introduction

## 1. Origins of Carbon Credits and Carbon Markets

Climate change is widely regarded as one of the greatest challenges of this century.[1] The United Nations (UN) primarily attributes climate change to human activity, including the emissions of greenhouse gases (GHG), most notably carbon dioxide ($CO_2$).[2] Consequently, in 1992, the United Nations adopted the United Nations Framework Convention on Climate Change (UNFCCC), the first international treaty on climate change, which created obligations for all states to stabilise GHGs in the atmosphere.[3] The historical and ongoing rise in GHG results from unsustainable energy consumption, changes in land use, inequality, and various other factors. The Intergovernmental Panel on Climate Change (IPCC) predicts that continued GHG emissions will lead to increasing global warming, estimating that it will reach 1.5°C in the near term in considered scenarios and modelled pathways,[4] whereas a consequence, continuing policy actions have been introduced calling to reduce GHG emissions, for which local and international mechanisms to do so are ever-increasingly being devised, tested, and adopted.

Following the UNFCCC, 1997 saw the adoption of the Kyoto Protocol.[5] The Protocol, in contrast with the UNFCCC, contains binding targets and does so for developed countries alone.[6] Article 6 of the Protocol allowed developed states to transfer or acquire what were originally referred to as *emission reduction units* from other developed states. These 'units' are

[1] The Preamble of the United Nations Framework Convention on Climate Change (UNFCCC); Bill Freedman, Graham Stinson and Paresh Lacoul (2009) "Carbon credits and the conversation and natural areas", *Environmental Reviews* 1; Shashank Bansal, et al (2022), "Strategic drivers for sustainable implementation of carbon trading in India", Environment, Development and Sustainability, at 4411.
[2] The Preamble of The United Nations Framework Convention on Climate Change; IPCCC Report AR6 Synthesis Report: Climate Change 2023 (Summary for Policy Makers), 4.
(Available at: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf) 4; Bill Freedman, Graham Stinson and Paresh Lacoul (2009) "Carbon credits and the conversation and natural areas", *Environmental Reviews* 1.
[3] Article 2 of the UNFCCC.
[4] IPCC Report AR6 Synthesis Report: Climate Change 2023 (Summary for Policy Makers), 12 (Available at: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf).
[5] E Glider and E Swanepoel "Climate Change" in ND King, HA Strydom and FP Retief (eds) *Fuggle and Rabie's Environmental Management in South Africa* 746.
[6] United Nations (2025) "What is Kyoto Protocol?" (Available at https://unfccc.int/kyoto_protocol)Ibid. 751. According to the United Nations, the Kyoto Protocol operationalises the UNFCCC by committing to the development of reducing emissions as per the agreed individuals. Some signatories, mostly notably the US, have refused to ratify the Protocol.

generated by or assigned to projects that either reduce emissions at the source or enhance carbon absorption through carbon sinks across various economic sectors – a carbon credit.[7]

More officially defined, the term *"carbon credit"* refers to the right to emit one metric ton of carbon dioxide that has either been prevented from entering the atmosphere or removed through designated emission-reduction projects.[8] Governments, companies, and individuals purchase these credits to meet their net-zero targets, where their purchase is recognised as offsetting their own emissions. 'High-quality' carbon credits are independently certified by a third-party organisation for assurance that the environmental impact of the credit is independently real, additional, permanent, and quantifiable and does not cause emissions elsewhere or, importantly, create harm. Conceived in this way, carbon credits are part of the arsenal of mitigation opportunities that society may use to tackle climate change by providing a tradeable mechanism to prompt proactive international and local responses to this global dilemma.

Article 12 of the Kyoto Protocol introduced three flexible market mechanisms, aimed to facilitate and administer Article 6 of the Protocol and provide the means for the trade of carbon credits as tradeable commodities via three key mechanisms: the so-called clean development mechanism (CDM);[9] joint implementation (JI);[10] and emissions trading.[11]

Overall, this system designates three basic types of carbon credits, namely those that are assigned to: i) reduce emissions, typically through energy efficiency measures; ii) remove emissions through carbon capture and planting forests; and iii) avoid emissions e.g. by

[7] Article 6 of the Kyoto Protocol 1996.

[8] "The CDM allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of $CO_2$. These CERs can be traded and sold and used by industrialised countries to meet a part of their emission reduction targets under the Kyoto Protocol. The mechanism stimulates sustainable development and emission reductions while giving industrialised countries some flexibility in how they meet their emission reduction limitation targets. The CDM is the main source of income for the UNFCCC Adaptation Fund, which was established to finance adaptation projects and programmes in developing countries Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change. The Adaptation Fund is financed by a 2% levy on CERs issued by the CDM." (Available at https://cdm.unfccc.int/about/index.html)

[9] The Kyoto Protocol, Article 12. See also United Nations The Clean Development Mechanism (Available at https://unfccc.int/process-and-meetings/the-kyoto-protocol/mechanisms-under-the-kyoto-protocol/the-clean-development-mechanism). Explain the term

[10] The Kyoto Protocol, Article 6. See also United Nations Joint Implementation (Available at https://unfccc.int/process/the-kyoto-protocol/mechanisms/joint-implementation) Explain the term

[11] The Kyoto Protocol, Article 6. See also United Nations Emissions Trading (Available at https://unfccc.int/process/the-kyoto-protocol/mechanisms/emissions-trading) See also Bill Freedman, Graham Stinson and Paresh Lacoul (2009) "Carbon credits and the conversation and natural areas", *Environmental Reviews* 4.

refraining from disturbing ecosystems such as rainforests in the pursuit of human development.[12]

Building upon the Kyoto Protocol, the 2015 Paris Agreement aimed to reinforce global efforts to combat climate change by setting legally binding emission reduction commitments. Article 6 of the Agreement introduced voluntary cooperative approaches, including carbon market mechanisms, to facilitate international collaboration in mitigating emissions.[13] Specifically, Article 6(4) establishes a market-based mechanism designed to incentivise and facilitate participation by both public and private entities in reducing GHG emissions.[14] Like the Kyoto Protocol, the Paris Agreement requires states to take meaningful action to reduce emissions and meet global temperature goals, thereby preventing the irreversible and catastrophic consequences of climate change.[15]

As noted above, each carbon credit represents one tonne of carbon dioxide or an equivalent amount of other GHGs that the recipient of the credit has either reduced, sequestered, or avoided.[16] Carbon markets serve as an option that allow states, corporations, and individuals (entities) to trade carbon credits, assigning an economic value measured in credits to initiatives aimed at reducing or eliminating deleterious emissions.[17] Signatory states are allocated a certain number of permits that allow them to emit GHGs up to a specified level.[18] Carbon markets can then be established either as compliance-based systems initiated by governments for regulatory purposes or as voluntary mechanisms, driven by both governments and businesses to reduce emissions.[19]

Compliance markets operate under regulatory frameworks and are mandated by policies or laws to control emissions. In compliance markets, governments set caps on emissions and issue allowances for emissions up to a certain limit. Companies or entities exceeding their allowances must purchase additional credits, incentivising emissions reduction to avoid extra

[12] Hartmann, T. & Broom, D. (2020). *What are carbon credits and how can they help fight climate change?* World Economic Forum, Geneva. (Available at: https://www.weforum.org/stories/2020/11/carbon-credits-what-how-fight-climate-change/ )
[13] Paris Agreement, Article 6.
[14] Ibid. at Article 6(2).
[15] The Paris Agreements (2015), Article 2 & 4. See IPCCC Report AR6 Synthesis Report: Climate Change 2023 (Summary for Policy Makers), 5 – 7. (Available at: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf )
[16] Id, 15. See also UNEP Rise Centre: Carbon Markets and Africa: A Quick Fact Sheet for Journalists (Available at https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Carbon%20Market%20Quick%20Facts%20%20ACF%202012.pdf ). See also Raphael Obonyo 'Creating credible carbon markets in Africa' (April 2024) (Available at https://www.un.org/africarenewal/magazine/april-2024/creating-credible-carbon-market-africa )
[17] Ibid.
[18] ACMI (2022) (n 6), 15.
[19] Sabrina Camélia Pagop and Luc Savard (2024) "Voluntary Carbon Markets in Africa", 5.

costs. Notable compliance markets include the European Union's Emissions Trading System (EU ETS), California's Global Warming Solutions Act, and China's National Emission Trading System. Compliance markets represent significant economic value, with the global carbon market reaching approximately $850 billion in 2021. They use either a carbon tax or a cap-and-trade system to control emissions.

Voluntary carbon markets (VCMs) are driven by entities aiming to offset unavoidable emissions. They enable companies and individuals to purchase verified carbon credits voluntarily, helping them meet climate goals, build brand recognition, or claim "carbon neutrality." In recent years, VCMs have seen exponential growth, reaching a value of $2 billion in 2021. Generating voluntary credits involves sustainable projects, such as renewable energy development and forest conservation, to offset residual emissions. Companies engage in VCMs as part of their sustainability commitments and to support climate mitigation efforts in various sectors.

The overarching goal of these markets is to facilitate the financial incentive devised by international climate change agreements that seek to motivate both public and private sector entities in signatory countries to lower their carbon footprint.[20]

[20] African Carbon Markets Initiative (ACMI): Roadmap Report (2022), 12. See also Carbon Market Institute, (n.d.) Carbon Markets: An overview (Available at chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://carbonmarketinstitute.org/app/uploads/2021/06/CMI_Fact_Sheet_2_Carbon-Markets-101.pdf.

## 2. Carbon Markets in the African Context

Africa's vast natural resources, diverse ecosystems, and rapidly growing economies make for an attractive carbon market.[21] However, although carbon markets have expanded globally and generated significant funds for climate mitigation, Africa remains marginalised, receiving less than 10% of the USD 1.095 trillion mobilised through various carbon funds and initiatives.[22] Additionally, Africa's share of CDM projects remains below 3%, in stark contrast to over 60% of projects in China.[23] The Continent's abundant forests, peatlands, and other carbon sinks, in principle, provide a significant opportunity for participation in carbon trading. The rationale for the advanced expansion of carbon markets into African territory is that this could offer African economies a much-needed source of climate finance, helping to support sustainable development, while assisting with global efforts to mitigate climate change.[24]

Global carbon markets, including international carbon offsets, have been designed to channel finance towards climate change mitigation in developing regions, making them crucial for African economies. These markets, which facilitate the trading of emission reduction credits, have emerged as vital tools to leverage both public and private capital for green growth across Africa, particularly in sectors such as sustainable agriculture and renewable energy. By assigning a price to carbon, these markets incentivise emission reductions, support technology transfer, and attract investment in low-carbon technologies.[25] Over the last decade, carbon trading has expanded significantly in volume, value, and impact, with mechanisms such as the CDM driving clean energy projects in developing countries. CDM projects have reached over 8,475, with Certified Emission Reduction (CER) permits totalling more than 1.7 billion tonnes of $CO_2e$.[26] VCMs have also played a significant role, as companies, governments, and individuals globally have invested nearly $4.5 billion in conservation and clean energy by

[21] African Carbon Markets: Status and Outlook Report 2024-25 (2024), 12.
[22] *World Development Indicators*. World Bank (either 2012 or n.d.). Retrieved [9 November 2024], from https://databank.worldbank.org/source/world-development-indicators#
[23] IPCC, 2013. Climate Change 2013: The Physical Science Basis. Summary for Policymakers. Cambridge University Press.
[24] ACMI (2022), 12. See also Carbon markets in Africa: balancing finance mobilization with emission reduction goals (8 August 2024) (Available at https://www.undp.org/africa/blog/carbon-markets-africa-balancing-finance-mobilization-emission-reduction-goals)
[25] Labatt, S., & White, R. R. (2011). *Carbon finance: The financial implications of climate change.* John Wiley & Sons; Stern, N. (2008). The economics of climate change. *American Economic Review,* 98(2), 1-37.
[26] Bernard, B., Wang'ombe, D., & Kitindi, E. (2017). Carbon Markets: Have They Worked for Africa? Review of Integrative Business and Economics Research, 6(2), 90-104. https://www.proquest.com/scholarly-journals/carbon-markets-have-they-worked-africa/docview/1917939010/se-2

purchasing almost 1 billion carbon offsets.[27] These voluntary initiatives have served as a testing ground for compliance-based carbon pricing programmes and have laid the foundation for a structured and regulated approach to carbon trading in Africa.[28]

Africa has not been the primary beneficiary of economic globalisation, with many economies still dependent on a narrow range of primary commodities, whose prices are externally controlled and are therefore missing out on the key benefits of globalisation such as job creation and the transfer of technology. This inequitable allocation of resources and access extends into climate policy, where Africa's priorities have often been side lined in global frameworks.[29] Despite Africa's abundant natural and renewable resources mentioned above, which are well-suited for sustainable energy production, the continent's potential for clean energy projects, critical to effective climate change mitigation, remains largely untapped. Carbon markets promise a mechanism to channel finance toward reducing greenhouse gas emissions and supporting Africa's green transformation. However, to date, Africa's gains from carbon markets have been minimal, with limited benefits, despite its renewable energy potential.[30]

The anticipated benefits of carbon finance in Africa have yet to align with actual outcomes, especially regarding the delivery of CERs and associated revenues.[31] Scholars and policymakers[32] have cited several barriers impeding Africa's progress in carbon markets, including high project costs, insufficient investment capital to fully develop CDM projects, limited private investment in afforestation and reforestation initiatives, uncertain demand for emission reductions, the complexity of CDM methodologies, and a lack of technical expertise and institutional capacity within African countries to meet CDM requirements. Although carbon markets have been heralded for their potential to engage powerful actors, such as

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[27] Gonzalez, G. (2015, June 3). *Voluntary buyers spend nearly $4.5 billion on offsets over last decade*. Ecosystem Marketplace. https://www.ecosystemmarketplace.com/articles/voluntary-buyers-spend-nearly-4-5-billion-on-offsets-over-last-decade/

[28] Climate Policy Initiative. (2015). *Carbon markets*. Climate Policy Initiative. (Available from https://www.climatepolicyinitiative.org/topics/carbon-markets/)

[29] Mulugeta, H. (2010). *Land suitability and crop suitability analysis using remote sensing and GIS application; a case study in Legambo woreda, Ethiopia*. MSc thesis, Addis Ababa University, Ethiopia.

[30] Pfeifer, G., & Stiles, G. (2009). *Carbon finance in Africa. In Africa Partnership Forum policy paper.* World Bank; Walker, G., & Devine-Wright, P. (2008). Community renewable energy: What should it mean? *Energy Policy*, 36(2), 497-500.

[31] Pfeifer, G., & Stiles, G. (2009). *Carbon finance in Africa. In Africa Partnership Forum policy paper.* World Bank; Muzee, K. S. (2011). Low-carbon Africa: Kenya. Practical Action Consulting, Nairobi. National Carbon Credit Council. (2023). *Regulatory guidance on Nigeria's carbon market approach*. National Carbon Credit Council. (Available from https://natccc.gov.ng/publications/NCCC%20Regulatory%20Guidance%20on%20Nigeria%E2%80%99s%20Carbon%20Market%20Approach.pdf)

[32] (e.g., Lyons, K., & Westoby, P. (2014). Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts. *Journal of Rural Studies,* 36, 13-21; UNEP, 2011 missing from references; Beck, F., & Martinot, E. (2004). Renewable energy policies and barriers. In C. Cleveland (Ed.), *Encyclopedia of energy* (pp. 365-383). Academic Press/Elsevier Science).

financiers, to drive new investment cycles and potentially foster alliances with environmental groups,[33] they face criticism for inadequate regulation, limited tangible climate mitigation impacts, and the marginalisation of poorer nations. Additionally, certain powerful entities, including financiers, have been accused of exploiting the markets. Ervine[34] notes that carbon finance remains highly volatile, heavily influenced by fluctuations in the global carbon market, marked by significant instability, making carbon one of the worst-performing commodities in 2011.[35]

Global efforts to combat climate change have underscored significant regional disparities in carbon finance readiness, with Africa often receiving minimal carbon finance flows compared to high-income regions. As of 2022, Africa's participation in the global carbon markets was estimated to be below $10 billion, a small fraction compared to the EU ETS, which was valued at over $760 billion in 2021.[36] This disparity highlights African nations' challenges in accessing the carbon finance landscape, where over 80% of global carbon credit issuances are dominated by high-income countries. At the same time, Africa and other low- and middle-income regions collectively receive less than 5% of the finance flows.[37]

Efforts have been launched to close this gap. Programmes under the UNFCCC, such as the CDM and the Green Climate Fund (GCF), have mobilised over $50 billion by 2023 to support carbon finance projects in developing regions.[38] The African Development Bank (AfDB) pledged $25 billion in climate finance between 2020 and 2025, emphasising carbon finance initiatives tailored to African contexts.[39] Despite these efforts, the impact remains limited, due to Africa's structural challenges, including weak regulatory frameworks, limited financial and technical capacity, and constrained access to global carbon markets.[40]

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[33] Bernard, B., Wang'ombe, D., & Kitindi, E. (2017). Carbon Markets: Have They Worked for Africa? Review of Integrative Business and Economics Research, 6(2), 90-104. https://www.proquest.com/scholarly-journals/carbon-markets-have-they-worked-africa/docview/1917939010/se-2

[34] Ervine, K. (2014). Diminishing returns: Carbon market crisis and the future of market-dependent climate change finance. *New Political Economy,* 19(5), 723-747.

[35] Bernard, B., Wang'ombe, D., & Kitindi, E. (2017). Carbon Markets: Have They Worked for Africa? Review of Integrative Business and Economics Research, 6(2), 90-104. https://www.proquest.com/scholarly-journals/carbon-markets-have-they-worked-africa/docview/1917939010/se-2

[36] International Carbon Action Partnership. (2022). *Emissions trading worldwide: ICAP status report 2022*. International Carbon Action Partnership. (Available from https://icapcarbonaction.com/en/publications/emissions-trading-worldwide-2022-icap-status-report)

[37] World Bank. (n.d. or 2023). *World Development Indicators*. World Bank. (Available from https://databank.worldbank.org/source/world-development-indicators#)

[38] United Nations Environment Programme (2023). Adaptation Finance Gap Update 2023. In Adaptation Gap Report 2023: Underfinanced. Underprepared. Inadequate investment and planning on climate adaptation leaves world exposed. Nairobi.

[39] African Development Bank. (2023). *Climate Change and Green Growth - 2023 Annual Report*. https://www.afdb.org/sites/default/files/documents/publications/afdb_climate_change_and_green_growth_2023_annual_report.pdf

[40] (World Bank, 2021; AfDB, 2020).

Some countries, particularly in Sub-Saharan Africa, have made progress through targeted carbon projects, including large-scale afforestation, reforestation, and renewable energy initiatives. For instance, Kenya's engagement with the CDM has led to the development of geothermal energy projects that reduce emissions and generate carbon credits.[41] However, the readiness for carbon finance across Sub-Saharan Africa varies greatly, with numerous countries lacking the necessary infrastructure, regulatory frameworks, and financing mechanisms to benefit from these global markets fully.[42] Addressing these gaps through capacity-building programmes, regional cooperation, and developing financial tools suited to local needs is critical to ensuring that African nations can fully participate in and gain from carbon finance initiatives.[43] This increased engagement promises to enable Africa to leverage its abundant renewable resources, fostering sustainable growth and supporting global climate mitigation efforts.

One of the touted benefits of credits is that they provide access to result-based finance for African entities and local communities without the need for debt.[44] A good example is the Wildlife Works' Kasigau Corridor REDD+ Project in Kenya, which has been devised to serve thousands of community members.[45] This project is situated between Tsavo East and Tsavo West National Parks in Kenya, which is the country's largest protected area.[46] In total, the project is hoped by its organisers to save 30 million tonnes of $CO_2$ emissions over its 30-year lifespan.[47]

The initiative produces more than 1 million voluntary emission reductions, that is, carbon credits available for purchase or sale.[48] Proceeds from such offsets are already helping nearly

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[41] Kenya Electricity Generating Company PLC (KenGen). (2021). *KenGen's Carbon Credit Portfolio. Kenya Electricity Generating Company PLC.* (Available at https://www.kengen.co.ke/images/docs/KenGens-Carbon-Credits-Portfolio.pdf)

[42] Mungai, E. M., Ndiritu, S. W., & Da Silva, I. (2022). Unlocking climate finance potential and policy barriers—A case of renewable energy and energy efficiency in Sub-Saharan Africa. *Resources, Environment and Sustainability,* 7, 100043.

[43] UNFCCC (2021). *Africa Climate Week 2021 Virtual Thematic Sessions Output Report*. https://unfccc.int/sites/default/files/resource/RCW_ACW21_OutputReport_08102021.pdf

[44] James Murombedzi (UNECA) & Richard Munang (UNEP) 'Carbon Markets for Africa: A Primer' (Available at https://akmh.uneca.org/sites/default/files/OIBC/4/Carbon%20Markets%20-%20A%20primer.pdf ).

[45] UNDP "Communities and Forest reaping benefits of carbon trading" (Available at https://www.unep.org/news-and-stories/press-release/communities-and-forests-reaping-benefits-carbon-trading. See also Verra Completes Review of Kasigau Projects (1 Febraury 2024) (Available at https://verra.org/verra-completes-review-of-kasigau-projects/)

[46] Ibid. See also Kasigau Corridor REDD+ Project Wildlife Works Kenya (Available at https://everland.earth/projects/kasigau/ )

[47] Ibid.

[48] UNDP "Communities and Forest reaping benefits of carbon trading" (Available at https://www.unep.org/news-and-stories/press-release/communities-and-forests-reaping-benefits-carbon-trading. See also Verra Completes Review of Kasigau Projects (1 Febraury 2024) (Available at https://verra.org/verra-completes-review-of-kasigau-projects/)

150,000 people in rural areas of Kenya by improving schools and water access. Additionally, it has created jobs for 300 local residents, including some former poachers, and individuals who previously engaged in illegal logging as a means of subsistence.[49] The project actively conserves wildlife, highlighting the various advantages of the REDD+ initiative.[50] This corridor reportedly now supports over 50 species of large mammals, more than 20 bat species, over 300 bird species, and significant populations of endangered wildlife, including more than 2,000 African individual elephants.[51]

However, despite reports such as this of the potential of carbon markets in Africa to bring about economic, social, and environmental gains, these markets have not been as effective as anticipated. As mentioned above, a major factor limiting the success of carbon markets on the Continent is the perennial lack of rigorous monitoring and regulatory frameworks.[52] Without strong regulatory structures to oversee the carbon market, many of the opportunities presented by carbon markets remain underutilised.[53] Weak regulations have also led to various challenges, including concerns over transparency, fair benefit-sharing, and the protection of local communities' rights. In some cases, carbon market projects have been linked to land disputes, displacement, and other human rights issues, raising ethical concerns about their implementation.

For instance, the Mai Ndombe REDD+ Project in the Democratic Republic of Congo (DRC), covers approximately 300,000 hectares of forest in the Mai Ndombe province of western DRC.[54] It was developed by Wildlife Works Carbon (WWC). It became operational in 2011 as one of the world's largest REDD+ projects, aiming to prevent deforestation while generating carbon credits for the voluntary market.[55] According to investigation reports, the project was implemented over territories where local communities held customary rights, but these rights were not adequately recognised or protected. Despite promises of community benefits, investigations found that revenue sharing was both inadequate and inconsistent.[56] Many

[49] Ibid.
[50] Ibid.
[51] Ibid.
[52] Augustine Senanu Komla Kukah et al. (2024) "How carbon trading contributes to reduction in emission of greenhouse gases: a narrative literature review", *Journal of Facilities Management* 2.
[53] ACMI (2022), 12. See also Carbon markets in Africa: balancing finance mobilization with emission reduction goals (8 August 2024) (Available at https://www.undp.org/africa/blog/carbon-markets-africa-balancing-finance-mobilization-emission-reduction-goals)
[54] Rainforest Foundation UK (2016). "Mai Ndombe: Will the REDD+ Laboratory Benefit Indigenous Peoples and Local Communities?" This report documented how the project failed to adequately involve local communities in planning and implementation.
[55] Rainforest Foundation UK (2016).
[56] Rights and Resources Initiative (2018). "Mai Ndombe: REDD+ Laboratory (DRC)." This assessment highlighted significant issues with the FPIC process and benefit distribution mechanisms.

communities reported receiving minimal benefits while, in turn, bearing significant costs from forest use restrictions. Additionally, communities faced new limitations on their traditional activities such as agriculture, hunting, and gathering, which threatened food security and cultural practices.[57]

In cases such as this, the current state of carbon markets in Africa demonstrates more obstacles than benefits.[58] While the potential for carbon trading to drive sustainable economic growth and climate resilience exists in principle, the absence of robust regulatory oversight necessarily undermines its potential for success.[59]

In response to such concerns, the Africa Carbon Markets Initiative (ACMI)[60] was launched at COP27 in Egypt as an innovative collaboration between the Global Energy Alliance for People and Planet, Sustainable Energy for All, and the United Nations Economic Commission for Africa, supporting the UN Climate Change High-Level Champions.[61] This initiative aims to enhance the voluntary and compliance carbon markets in Africa by significantly increasing the continent's contribution to reducing global GHGs under the Paris Agreement.[62] It has the potential to ignite sustainable economic development through climate change mitigation that will support Africa's transition toward low-carbon economies.[63]

The ACMI is launching a series of reports into the potential of carbon markets in Africa – markets still face credibility, transparency, and equity issues, especially for large-scale land-use projects such as REDD+, for transformational change.[64] This change is envisioned in terms of environmental, economic, and co-benefits associated with job creation, food security, health improvements, and climate resilience.[65] The ACMI also supports carbon market development across Africa, with notable developments such as countries' engagements in developing carbon market regulations, securing investments for high-integrity African carbon projects, and

[57] Ibid.
[58] ACMI (2022).
[59] Ibid.
[60] The AICM states that it "aims to expand Africa's voluntary and compliance carbon markets, enhancing the continent's contribution to global carbon reduction under the Paris Agreement." Through strategic pillars of Collaboration and Integrity, Support and Development, Knowledge and Leadership, and Advocacy and Market Development, the ACMI states that it "strives to enhance the role and impact of African carbon markets globally." See https://africacarbonmarkets.org
[61] The AICM: See https://africacarbonmarkets.org/ See also https://africacarbonmarkets.org/carbon-markets-africa/ See also https://www.seforall.org/our-work/initiatives-projects/ACMI.
[62] Ibid.
[63] Ibid.
[64] Ibid.
[65] Ibid.

compiling a comprehensive listing of over 100 carbon credit projects.[66] The continued nurturing of collaboration and support for African governments, project developers, and communities has the potential for the full realisation of African carbon markets.[67] This could mean that by 2030, the market will be 19 times larger, generating potential revenues as high as US$6 billion and creating 30 million jobs. Achieving this ambitious vision will require all market actors – governments, suppliers, and buyers alike – to be able to secure integrity, transparency, and equity across the market.[68]ACMI's initiatives aim to ensure that the revenue generated from carbon credits is distributed equitably, particularly to local communities. Africa's participation in global carbon markets expands significantly, while prioritising transparency, fairness, and long-term environmental impact.

Africa faces several significant challenges in its participation in the global carbon market under the Paris Agreement.[69] One primary obstacle that has been noted thus far is the regulatory framework gaps present in many African nations, where the absence of robust regulations creates uncertainty for investors and project developers.[70] This lack of clarity often leads to stalled emission reduction initiatives as stakeholders hesitate to commit resources without a clear legal and regulatory environment. Additionally, complex approval processes further complicate the development of carbon projects, deterring potential developers who may find navigating these bureaucratic hurdles to be overly time-consuming and complicated.

Moreover, the continent struggles with monitoring infrastructure deficiencies that hinder the effective tracking and verification of emission reductions, making it challenging to ensure compliance and maintain the integrity of carbon credits.[71] Inadequate monitoring systems can erode the trust of international buyers in the quality of African carbon credits, which is crucial for participating in the global market. Finally, limited information access poses a substantial barrier, as restricted availability of data and resources regarding carbon markets inhibits awareness and understanding among potential developers.[72] This lack of knowledge prevents African countries from fully leveraging opportunities within the carbon trading landscape, further side lining them from active participation in global carbon market mechanisms.[73]

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[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Ibid.
[71] Ibid.
[72] Ibid.
[73] Zhakata, W. (2024). *Africa's participation in the global carbon market: History, challenges, and opportunities*. United Nations Economic Commission for Africa. (Available at https://www.uneca.org/eca-events/sites/default/files/resources/documents/ACPC/ARTICLE6/Presentations/africa_participation_in_the_glo

bal_carbon_market_history_challenges_and_opportunities_washington_zhakata.pdf); Africa Carbon Markets Initiative. (2023). *About us*. Africa Carbon Markets. (Available at https://africacarbonmarkets.org/about-us/).

## 3. Objective of the Study

The study aims to examine and compare the regulatory approaches to carbon credits and markets across selected African jurisdictions whilst focusing on the following questions:

a) What are carbon credits and carbon markets, and how are they defined across different jurisdictions?

b) What are the key differences between voluntary and compliance (mandatory) carbon markets?

c) What regulatory frameworks and institutions regulate the sale and purchase of carbon credits, and what mechanisms exist for dispute resolution?

d) How do these regulatory frameworks compare across different African countries, and to what extent do they protect the rights of local and Indigenous communities?

# 4. Carbon Credits and Carbon Markets: A Conceptual Framework

## 4.1 Compliance and voluntary carbon markets

As noted in the introduction to Africa's carbon markets above, carbon markets are categorised into two main types: compliance and voluntary carbon markets. Compliance carbon markets are regulated systems in which companies, industries, or governments are legally required to account for their greenhouse gas emissions.[74] In these markets, entities must comply with mandatory emission caps established by national, regional, or international regulations.[75] For example, South Africa is currently the only African State with a compliant carbon market established under the Carbon Tax Act of 2019.[76]

VCMs, on the other hand, function outside of regulatory frameworks, allowing companies, individuals, and organisations to buy and sell carbon credits on a voluntary basis.[77] In contrast to the compliance markets, there is no legal requirement or regulatory obligation to participate in the VCMs.[78] These markets pose self-devised climate targets, demonstrate environmental responsibility, or address corporate social responsibility commitments.[79]

Of these two alternatives, most of Africa engages in VCMs, which offers a more flexible and accessible route to generating and trading carbon credits. Notably, compliance carbon markets tend to be more centralised and government-driven, while voluntary markets are more decentralised, covering a wide range of projects and participants, such as local communities.[80] Given that South Africa is currently the only African state with a compliant carbon market, this report primarily concentrates on VCMs across the Continent.

VCMs present significant opportunities for various stakeholders, including businesses. They support projects that align with Africa's development priorities and assist the continent in

[74] African Carbon Markets (n 5), 6. See also Raphael Obonyo (n 8).
[75] Ibid.
[76] Carbon Tax Act (2019). See also Bowmans: Recent developments in African carbon markets (November 2023), 2 – 3.
[77] Ibid. See also Raphael Obonyo (n 8).
[78] Sabrina Camélia Pagop and Luc Savard (2024) "Voluntary Carbon Markets in Africa", 4
[79] Id, 2. See also Huang et al., (2022) Impact of Environmental Regulations on Export Trade—Empirical Analysis Based on Zhejiang Province. International Journal of Environmental Research and Public Health.
[80] African Carbon Markets (n 5), 6.

achieving its goals.[81] The compulsory carbon markets and VCMs are claimed to present a transformative opportunity for Africa, enabling the continent to harness its vast natural resources, while simultaneously addressing pressing developmental challenges and climate change.[82] This claim is based on the fact that markets promise to provide significant financial incentives for sustainable practices across various sectors including forestry and land use, agriculture and soil sequestration, renewable energy, job creation, pastoralism, and household energy solutions.[83] Africa's rich biodiversity and diverse ecosystems would indeed offer immense potential for successful carbon markets, which may result in innovative solutions to energy access, food security, and economic development.[84] However, both compliance and voluntary markets are continually evolving, which necessitates robust regulatory frameworks across international, national, and sub-national governments.[85] It is notable that, given the lack of transparency at an international level regarding carbon offsetting, there is a distinct need to tighten gaps at a local level by developing a robust interface with this wider system that can meet local justice imperatives. Suppose South Africa and other African nations continue to engage in carbon markets; in that case, it is incumbent on them to establish a robust national framework to anticipate and safeguard against the failures of the CDM and VCMs, which globally have instead been fraught with controversy, including poor transparency, double counting, human rights abuses, and land grabs. It is notable that the very definition of carbon credit as a contrived unit of value is that it ought to bear no harm.

[81] Africa Environment Outlook for Business (n 22), 211 – 212.
[82] Ibid.
[83] Ibid.
[84] Africa Environment Outlook for Business (n 22), 211 – 212.
[85] Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (2024), Global Carbon Market (Available at giz2024_en_global-carbon-market-caribbean-eastern-africa.pdf)

# 5. Stakeholders in Africa's Carbon Markets

As part of an attempt to reach transparency in the carbon market, it is necessary to identify the exact roles that its various stakeholders play in particular, directly impact the justice and equity outcomes for local communities involved in carbon credit projects. This forms part of any introductory survey to the justice concerns relevant to the carbon market. Key players that have been identified so far include project developers, credit sellers, credit buyers, and validation and verification bodies (VVBs), although this may not be an exhaustive list. The following sections outline each stakeholder's role within the African carbon market and discuss how justice considerations align with their responsibilities to protect and empower African communities in this emerging carbon market.

## 5.1 Project Developers

Project developers form the backbone of the supply side of carbon markets, creating projects that generate carbon credits through activities designed to reduce or sequester GHGs.[86] In Africa, developers often leverage the continent's rich natural resources, such as forests, land, and renewable energy potential, to facilitate the production of credits.[87] Justice considerations are especially relevant in the development of projects, as many of these initiatives occur on lands traditionally owned by or essential to local communities beleaguered by colonial extractionism, from various global actors, past and present.

When considering what this would mean for a truly just framework devised to prioritise local interests, it is unescapable on developers to incorporate human rights protections in order to prevent displacement or exploitation, and they ought to ensure that communities receive equitable benefits from projects taking place on their lands.[88] This is, however, not always the case in many African countries.

A notable example has emerged in the recent investigation conducted about the Kariba REDD+ project in Zimbabwe, which aimed to curb deforestation and land degradation, concerns were raised about the manner in which the financial benefits were distributed.[89] While Kariba

[86] Vittoria Battocletti, Luca Enriques and Allessandro Romano, 'The Voluntary Carbon Market: Market Failures and Policy Implications' (2024) 95(3*) University of Colorado Law Review,* 538.
[87] African Carbon Markets (n 5), 25-28.
[88] African Carbon Markets (n 5), 25-28.
[89] Carbon Credits In Zimbabwe – An Analysis Of The Regulatory Framework 20 November 2023 (available at: https://www.mondaq.com/climate-change/1391754/carbon-credits-in-zimbabwe--an-analysis-of-the-regulatory-

REDD+ generated over €100 million by early 2023, only a fraction of these funds reached local communities, with the majority reportedly going to project developers.[90] This has sparked debate over equitable compensation, as these communities bear the brunt of restrictions on land use for conservation.[91] Additionally, the local communities reported limited involvement in project governance despite the fact that their participation is essential for ongoing conservation efforts.[92]

Such incidents highlight the challenge of ensuring that VCM projects truly serve local communities while also achieving emissions reduction targets. Notably, for example, Zimbabwe's carbon market policies do not yet enjoy a regulatory framework for these voluntary projects, which complicates monitoring and accountability.[93] This lack of oversight has prompted calls for clear regulatory structures that would enforce fair benefit-sharing and transparency in Zimbabwe's carbon markets.[94]

### 5.2 Credit Sellers

Credit sellers often overlap with project developers in terms of their role in the carbon market. They are responsible for bringing carbon credits to the market and acting as intermediaries between the supply and demand of carbon credits.[95] In Africa, credit sellers are uniquely positioned to influence justice in carbon markets by ensuring that local communities and project participants are fairly compensated.[96] They also facilitate transparency and accountability in the distribution of revenues from credit sales, ensuring that funds flow back into communities supporting local socio-economic growth.[97]

An example of a credit seller in the African carbon market is the Kenya Forestry Service (KFS), which manages forest conservation projects that generate carbon credits through reforestation and afforestation efforts.[98] Acting as a credit seller, the KFS brings these credits to market,

framework) See also Beatrice Moyo ' Carbon credits law in Zimbabwe' (7 November 2023) (Available at https://www.newsday.co.zw/opinion-analysis/article/200019169/carbon-credits-law-in-zimbabwe) See also Law governing trading of carbon credits 16azette (21 August 2023) (Available at: https://www.zimbabwesituation.com/news/law-governing-trading-of-carbon-credits-gazetted/ )

[90] Ibid.
[91] Ibid.
[92] Ibid.
[93] Ibid.
[94] Ibid.
[95] Battocletti et al. (n 82), 538.
[96] Law governing trading of carbon credits gazetted (21 August 2023) (Available at: https://www.zimbabwesituation.com/news/law-governing-trading-of-carbon-credits-gazetted/).
[97] Ibid.
[98] See Kenya's Forest Services (Available at https://www.kenyaforestservice.org/)

offering them to buyers looking to offset their emissions.[99] By engaging with local communities in these projects, the KFS can influence justice in the carbon market by ensuring fair compensation for the local participants involved in the forest conservation efforts.[100] The KFS also has the responsibility to ensure that revenue from credit sales supports community projects, such as education and health programmes, thereby fostering sustainable economic growth and enhancing local livelihoods.[101] This approach emphasises transparency and accountability, with mechanisms in place to trace the flow of funds back to the communities, which is the equitable benefit of carbon credits in African contexts.

### 5.3 Credit Buyers

Credit buyers, including corporations, governments, and other entities seeking to offset their emissions, purchase carbon credits to meet compliance or voluntary emissions reduction targets.[102] Typically, these buyers are based in developed nations or large corporations from the Global North, and they have a vested interest in balancing their carbon footprint.[103] In Africa, where emissions are generally lower, demand for credits is limited on the buyer side; instead, African countries prioritise the supply side, aligning with their economic development goals.[104] Ensuring justice in credit purchases means that buyers ought not only to contribute financially to the purchase of credits but ought also to commit to ethical standards that respect local community rights and prevent exploitation. Responsible credit buyers ought to seek projects verified to uphold community rights and sustainability principles, fostering trust, and ensuring the benefits of these transactions reach the grassroots level.

An example of a prominent credit buyer is the MTN Group, one of Africa's leading telecommunications companies, which has also begun purchasing carbon credits to offset emissions in alignment with its sustainability targets.[105] MTN aims to reach net-zero emissions by 2040, and as part of this goal, it engages in purchasing carbon credits generated from African projects, such as reforestation and renewable energy initiatives.[106] MTN has been intentional about selecting credits that meet stringent social and environmental standards, which helps

[99] Ibid. See also https://www.kenyaforestservice.org/nrt-seeeks-partnership-with-kfs-in-coastal-terrestrial-carbon-project/
[100] Ibid.
[101] Ibid.
[102] Battocletti et al (n 82), 538.
[103] ACMI (2022) (n 6), 19.
[104] ACMI (2022) (n 6), 21.
[105] MTN Group Limited Net Zero Philosophy 2022 (Available at https://mtn-investor.com/reporting-suite/pdf/MTN_FY23_Climate_Report.pdf
And https://www.mtn.com/wp-content/uploads/2023/05/MTN-Net-Zero-Philosophy-2022_WEB.pdf).
[106] Ibid.

ensure that local communities benefit from these offsets through shared revenue and sustainable development opportunities.[107]

### 5.4 Validation and Verification Bodies (VVBs)

Validation and Verification Bodies (VVBs) are independent entities that verify whether carbon projects meet established standards and validate the emission reductions they claim to achieve.[108] They perform critical audits and assessments throughout the project cycle, assuring stakeholders that the credits generated are credible, and meet international standards.[109] VVBs play a central role in justice, by upholding the quality and integrity of carbon projects.[110] They prevent malpractice, such as double counting, greenwashing, and violations of local rights.[111] VVBs are instrumental in stepping in where allegations of fraud, misrepresentation, or human rights abuses arise.[112] Where they can ensure projects adhere to stringent criteria, VVBs protect credit buyers and communities from unethical practices, with the ostensible goal of enabling a just, transparent, and effective carbon market.[113]

Verra is a leading global standards organisation in the carbon market that plays a significant role in Africa by developing and managing frameworks that certify the generation and trade of carbon credits.[114] Specifically, Verra's Verified Carbon Standard (VCS) is one of the most widely recognised programmes worldwide, certifying projects that reduce, remove, or avoid GHG emissions.[115] Verra works with independent VVBs that assess whether projects meet the required standards *before* issuing credits. This ensures that African carbon credits remain credible and can command higher value on global markets, attracting more investment to the region.[116] Verification processes through VVBs also help maintain transparency and public trust in the carbon market. [117]

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[107] Ibid.
[108] Battocletti et al (n 82), 542 - 544.
[109] Ibid.
[110] Ibid.
[111] Ibid.
[112] Validation & Verification Bodies – Gold Standard for the Global Goals (Available at https://globalgoals.goldstandard.org/verification-validation-bodies/ ).
[113] Validation & Verification Bodies – Gold Standard for the Global Goals (Available at https://globalgoals.goldstandard.org/verification-validation-bodies/ ).
[114] Verra, (Available at https://verra.org/about/overview/#overview ).
[115] Verra Annual Report 2023: Evolving Excellence – Advancing climate action and sustainable development (2023) (Available at https://verra.org/wp-content/uploads/2024/10/verra-annual-report-2023.pdf ).
[116] Ibid.
[117] Ibid.

Recognising the challenges African countries face in terms of technical expertise and infrastructure, Verra has made efforts to support capacity building and stakeholder engagement on the Continent.[118] These activities help local project developers, regulators, and other stakeholders understand and navigate carbon market requirements, ultimately fostering a more robust and self-sustaining market environment in Africa.[119]

Currently, Verra stands as the leading institution regulating the sale and purchase of carbon credits and addressing rights-related contestations. Nearly all carbon credits in Africa are certified by Verra, which, in addition to its role in certifying carbon credits, has also provided a certain degree of clarity regarding regulatory standards.[120]

[118] Verra Annual Report 2022 (Available at https://verra.org/wp-content/uploads/2023/11/2022-Verra-Annual-Report.pdf ).
[119] Ibid.
[120] See data from 'Climate Action Data Trust'Available at https://data.climateactiondata.org/search/projects ). See also Carbon Market Institute, (date unknown) Carbon Markets: An overview (Available at chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://carbonmarketinstitute.org/app/uploads/2021/06/CMI_Fact_Sheet_2_Carbon-Markets-101.pdf.

## 6. Selling the Carbon Credit Structure to African policymakers

As has been noted, carbon markets in Africa have been presented as a powerful tool for achieving both environmental sustainability and socio-economic development by those who devised and benefit from them.[121] It is argued by these stakeholders in the market that by conserving forests, enhancing soil health, promoting clean energy, and creating jobs, voluntary carbon markets align environmental conservation with developmental priorities such as poverty alleviation, food security, and infrastructure development.[122] By positioning carbon markets as a win-win solution, they are framed as mechanisms that not only contribute to global emissions reductions, but also are able to generate tangible benefits for African economies and communities.[123]

Taking into account these assumptions and claims, the next section examines how carbon markets are 'strategically marketed' to African policymakers and executives, emphasising their supposed strengths and opportunities, and downplaying their potential for harm.[124] The narrative portrays these markets as an effective means to attract climate finance, support sustainable development, and integrate Africa into the global carbon economy.[125] However, this portrayal does not always reflect the realities as these have taken place over the years on the ground. In many cases, the practical implementation of carbon markets in Africa has failed to live up to touted expectations, with failures related to regulatory gaps, lack of transparency, and sometimes destructive social impact.[126]

[121] See ACMI (2022). See also Carbon markets in Africa: balancing finance mobilization with emission reduction goals (8 August 2024) (Available at https://www.undp.org/africa/blog/carbon-markets-africa-balancing-finance-mobilization-emission-reduction-goals) See also James Murombedzi (UNECA) & Richard Munang (UNEP) 'Carbon Markets for Africa: A Primer' (Available at https://akmh.uneca.org/sites/default/files/OIBC/4/Carbon%20Markets%20-%20A%20primer.pdf ).
[122] Ibid.
[123] Ibid.
[124] Ibid.
[125] Sabrina Camélia Pagop and Luc Savard (2024) "Voluntary Carbon Markets in Africa" See also Shashank Bansal, et al (2022), "Strategic drivers for sustainable implementation of carbon trading in India", *Environment, Development and Sustainability*, 4419. These points are explored further in para 5.
[126] For example: Rainforest Foundation UK (2016). "Mai Ndombe: Will the REDD+ Laboratory Benefit Indigenous Peoples and Local Communities?" This report documented how the project failed to adequately involve local communities in planning and implementation. See also Lang, C., & Byakola, T. (2006). "A Funny Place to Store Carbon: UWA-FACE Foundation's Tree Planting Project in Mount Elgon National Park, Uganda." World Rainforest Movement.

### 6.1 Forestry and Land Use

As noted, Africa's biodiversity and ecosystems comprise tropical forests, savannah, and wetlands and offer significant potential for carbon sequestration.[127] Voluntary carbon markets are touted to be able to leverage Africa's natural assets to create projects such as reforestation, afforestation, and forest conservation projects, offering states carbon credits that derive from these national and local assets that can be exchanged to offset emissions globally.[128]

Carbon credits from forestry projects could offer financial resources for community-driven conservation efforts, supporting sustainable land use and local capacity-building.[129] This incentivises communities to engage in biodiversity conservation, enhancing local ownership of natural resources.[130] Additionally, the preservation of forests and ecosystems provides essential services such as clean water,[131] pollination,[132] and climate adaptation.[133] These projects could thus foster community empowerment, improved health, and constructive environmental outcomes.[134]

### 6.2 Agriculture and Soil Sequestration

Agriculture is central to Africa's economy, with smallholder farmers comprising a large segment of the workforce. Africa's agricultural landscapes are conceived to offer the global carbon market the potential for carbon sequestration through sustainable land management practices.[135] By suggesting techniques such as agroforestry, cover cropping, and improved soil management, carbon marketeer proposition farmers to increase soil carbon storage, while maintaining crop productivity, could thereby contribute to the continent's overall sequestration potential.[136]

Voluntary carbon markets could provide potential financial incentives for farmers who adopt sustainable practices that have substantial benefits for local communities.[137] Carbon credits

[127]Africa Environment Outlook for Business (n 22), 212. See also ACMI (2022) (n 6), 12.
[128] Bowmans (n 25), 2.
[129] Africa Environment Outlook for Business (n 22), 212. See also ACMI (2022) (n 6), 12.
[130] The African Union Commission 'The sustainable Forest Management Framework for Africa (2020 – 2030), at 1.
[131] Ibid.
[132] Id, 5.
[133] ACMI (2022) (n 6), 12. See also James Murombedzi (UNECA) & Richard Munang (UNEP) (n 19 above).
[134] Ibid.
[135] African Carbon Markets (n 5), 17. See also Africa Environment Outlook for Business (n 22), 212. See also ACMI (2022) (n 6), 12.
[136] Ibid.
[137] Ibid.

potentially help fund these practices, enhancing soil health, crop yields, and resilience against climate change impacts like droughts and floods.[138] Training in sustainable practices could further empower farming communities, improving agricultural productivity and food security. Additionally, these practices could support economic development by strengthening agricultural sustainability, providing income stability, and building climate resilience.

### 6.3 Renewable Energy

Africa's rapid urbanisation creates a demand for clean energy alternatives to reduce dependency on fossil fuels on the Continent.[139] Its abundant renewable energy potential, such as solar, wind, and hydroelectric,[140] can be harnessed within voluntary carbon markets to produce credits from clean energy projects, with the potential to enhance urban energy resilience and carbon reduction.[141]

Carbon market financing proposes to help cities attract investment in renewable energy infrastructure, expanding access to clean energy in informal settlements where energy poverty is prevalent.[142] Transitioning to renewable energy addresses air pollution, improving urban air quality, and reducing healthcare costs associated with respiratory illnesses.[143] Renewable energy projects also generate jobs in construction, maintenance, and operations, contributing to economic growth and social development.[144] As cities invest in sustainable infrastructure, voluntary carbon markets could help drive urban transformation and enhance quality of life.[145]

### 6.4 Job Creation

With a young and growing workforce, Africa has a strong labour base that proves attractive to the expanding carbon market ecosystem.[146] Sectors like renewable energy, forestry, and sustainable agriculture require skilled labour, from project development to environmental monitoring, creating the potential for diverse employment opportunities across the continent.[147]

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[138] Ibid.
[139] Africa Environment Outlook for Business (n 22), 211 – 212. See also ACMI (2022) (n 6), 12.
[140] Ibid.
[141] Ibid.
[142] Ferdinand Omindi 'The Toxic Air We Breathe: Greenpeace Maps Africa's Air Pollution Hotspots' (28 March 2024).
[143] Ibid.
[144]Africa Environment Outlook for Business (n 22), 213.
[145] Ibid.
[146]African Carbon Markets (n 5), 17. See also Africa Environment Outlook for Business (n 22), 212. See also ACMI (2022) (n 6), 12.
[147] Ibid.

Voluntary carbon markets could support job creation and skill development, equipping workers with expertise in project management, carbon accounting, and environmental conservation.[148] This promise not only increases employment, but also supports economic diversification and resilience against economic shock.[149]

### 6.5 Livestock and Pastoralism

Pastoralism, a cultural and economic pillar across Africa, involves the management of vast grazing lands, offering potential for carbon sequestration through sustainable land management practices.[150] By recognising pastoralists' contributions to carbon storage, voluntary carbon markets could be made to support sustainable grazing practices.[151]

Carbon credits provide direct payments to pastoralists who adopt rotational grazing and other sustainable practices, enhancing land health, restoring pastures, and increasing biodiversity.[152] These initiatives could support resilience to climate variability, contributing to food security within pastoral communities.[153] Financial resources from carbon credits can be reinvested into local infrastructure, healthcare, and education, fostering socio-economic development and environmental sustainability in pastoral regions.[154]

### 6.6 Household Devices

Many African households rely on charcoal and wood for cooking, contributing to deforestation and health issues from indoor air pollution.[155] By transitioning to efficient cooking technologies, such as improved cookstoves or LPG stoves, Africa can leverage voluntary carbon markets to reduce carbon emissions at the household level.[156]

Voluntary carbon markets have the potential to incentivise cleaner cooking technologies, which decrease indoor air pollution, improve health outcomes, and reduce fuel costs.[157] The demand

[148] Ibid. See also International Labour Organisation "Carbon markets and their implications for a just transition for all" (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ilo.org/sites/default/files/2024-11/Issue%20Brief_Draft2_%20Carbon%20markets%20and%20their%20implications%20for%20a%20just%20transition%20for%20all_v2.pdf)
[149] Ibid.
[150] Africa Environment Outlook for Business (n 22), 212.
[151] ACMI (2022) (n 6), 12.
[152] Ibid.
[153] Ibid.
[154] Ibid.
[155] ACMI (2022) (n 6), 12.
[156] Africa Environment Outlook for Business (n 22), 212.
[157] African Carbon Markets (n 5), 18.

for efficient stoves may also create local business opportunities in manufacturing and distribution, stimulating local economies and creating jobs.[158]

[158] Ibid.

## 7. Barriers to Scaling Africa's Voluntary Carbon Markets: Weak Regulatory Frameworks Lead to Human Rights Injustices

As noted, at the forefront of barriers to carbon accreditation of Africa's natural resources is the uncertain regulatory landscape, which discourages investors and stakeholders from seeking clarity on policies and regulatory standards.[159] This regulatory ambiguity permeates nearly all aspects necessary for a successful voluntary carbon market, thereby restricting Africa's ability to fully realise the socio-economic and their environmental benefits.[160] In essence, the legal frameworks intended to regulate carbon markets in Africa are scarce, and those that exist have significant limitations and have not been fully developed.

The absence of robust regulatory frameworks allows for bad faith actors, who commit exploitation and abuse. Such risk snare disproportionately borne by indigenous communities and women. Without proper and effective regulations, carbon markets pose a risk to society, where they may exacerbate social inequalities and create human rights injustices instead of delivering their intended benefits. Without strong regulatory frameworks, good faith cannot undergird such a system, and such negative outcomes cannot be avoided, while the potential positive outcomes discussed in detail in the previous section can easily be foreclosed.

Carbon market initiatives remain small-scale, primarily managed by local communities without access to large-scale developers who possess the capital and expertise to create more extensive, unified projects.[161] This lack of large-scale capacity further limits the market's potential for development and widespread impact.[162] Further to this, concerns have been raised about a fair and equitable transition in carbon trading.[163] For example, the informal workers and the "groups already facing socio-economic vulnerabilities may not have the capacity to participate in the carbon market and be excluded".[164]

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[159] ACMI (2022) (n 6), 21-22.
[160] Ibid.
[161] ACMI (2022) (n 6), 24.
[162] Ibid.
[163] International Labour Organization "Carbon markets and their implications for a just transition for all" (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ilo.org/sites/default/files/2024-11/Issue%20Brief_Draft2_%20Carbon%20markets%20and%20their%20implications%20for%20a%20just%20transition%20for%20all_v2.pdf)
[164] Ibid.

The International Labour Organization (ILO) contends that consultation and public participation mechanisms may be weak in the case of indigenous communities.[165] Indigenous communities risk displacement from their ancestral lands due to the mismanagement of carbon credit projects, resulting in loss of income and livelihoods. Thus, the carbon market needs to be implemented with careful consideration of a just transition, so as to prevent worsening existing issues and inequalities and to prevent bad faith schemes.[166] The UN Special Rapporteur raised concerns about carbon credits and the potential violation of indigenous communities' human rights.[167] According to Amnesty International, polluters can use the carbon markets to offset their GHG emissions by buying carbon credits for projects conducted on indigenous people's land, instead of actually reducing emissions.[168] Amnesty International contends that these carbon credit initiatives can be found to do more harm than good to indigenous communities.[169] The carbon market is also criticised for having inadequate safeguards for human rights, which makes it susceptible to abuse.[170]

### 7.1 Human Rights Injustices in Africa's Voluntary Carbon Market: A Closer Look

The regulatory gap described above enables exploitation and human rights injustices, which disproportionately affect both broader local as well as particular indigenous communities. One of the most significant human rights violations to be found is **land dispossession and forced evictions.**

Many carbon projects are established on land traditionally occupied by indigenous communities, yet these communities often have little or no say in decisions affecting their lands.[171] Without proper consultation or compensation, they can be forcibly removed, losing access to their homes and livelihoods, and significantly, to their inherited and inheritable wealth, potentially affecting multiple generations. This displacement leads to food insecurity and economic marginalisation.[172] It also constitutes a direct violation of their right to self-

[165] International Labour Organization "Carbon markets and their implications for a just transition for all" (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ilo.org/sites/default/files/2024-11/Issue%20Brief_Draft2_%20Carbon%20markets%20and%20their%20implications%20for%20a%20just%20transition%20for%20all_v2.pdf)
[166] Ibid
[167] Ibid.
[168] Amnesty International "Global: UN Special Rapporteur is right to raise human rights concerns about carbon markets" (Available at https://www.amnesty.org/en/latest/news/2024/04/global-un-special-rapporteur-is-right-to-raise-human-rights-concerns-about-carbon-markets/)
[169] Ibid
[170] Ibid.
[171] International Labour Organization "Carbon markets and their implications for a just transition for all".
[172] International Labour Organization "Carbon markets and their implications for a just transition for all".

determination,[173] and public participation in decision-making processes that impact them, potentially for generations to come.

For instance, the FACE Foundation (Forests Absorbing Carbon Dioxide Emissions) was a Dutch non-profit organisation that partnered with the Uganda Wildlife Authority (UWA) in the 1990s to establish the UWA-FACE project.[174] The project's ostensible aim was to plant trees in Mount Elgon National Park and Kibale National Park to sequester carbon and generate carbon credits for sale on international markets.[175] However, it was said that between 1990 and 2002, an estimated 6000 to 35000 people were evicted from Mount Elgon.[176] Many of these people belonged to the Benet and Ndorobo indigenous communities.[177] Homes were burned, property destroyed, and reports abounded of violence and intimidation by park rangers.[178] Many of these people had defined legal or customary claims to the land, and most of them received little to no compensation.[179] The evictions created a human rights crisis, with displaced people lacking shelter, food security, and access to basic services.[180]

Another example is the Green Resources, a Norwegian forestry company which has been the subject of significant criticism for its carbon offset in Tanzania in the Mufindi District. The Green Resources secured a 99 year lease on approximately 34000 hectares in that district. However, based on the Oakland Institute's investigations several human rights violations were flagged. Communities were said to have lost access to land previously used for subsistence farming, grazing livestock, and gathering resources.[181] Communities reported increased food insecurity after losing access to agricultural lands and forest resources.[182] Workers also reported poor wages and unsafe working conditions.[183]

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[173] International Covenant on Civil and Political Rights (16 December 1966, entry into force 23 March 1976) Article 1 of the ICCPR states that "All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development/"
[174] Lang, C., & Byakola, T. (2006). "A Funny Place to Store Carbon: UWA-FACE Foundation's Tree Planting Project in Mount Elgon National Park, Uganda." World Rainforest Movement.
[175] Ibid.
[176] Ibid.
[177] Okwaare, S., & Harrington, A. (2011). "The UWA-FACE project in Mount Elgon, Uganda." In Ecosystem Restoration and Carbon Capture: The Potential of Carbon Sequestration and Forest Protection Projects in Developing Countries.
[178] Ibid.
[179] Ibid.
[180] Ibid.
[181] The Oakland Institute (2019). "Evicted for Carbon Credits: Norway, Sweden, and Finland Displace Ugandan Farmers for Carbon Trading."
[182] The Oakland Institute (2019).
[183] Ibid.

**Gender-based violence** is also a critical issue in carbon market projects in Africa. Cases such as the Kasigau Corridor REDD+ Project have revealed instances of sexual harassment and exploitation, where women are coerced into providing sexual favours in exchange for job opportunities.[184] Al Jazeera has also found that human rights abuses are linked to the carbon market projects.[185] Further to this, in 2023, SOMO (Kenyan international human rights organisations) and Kenya Human Rights Commission compiled a report on human rights violations at the Kasigau Corridor REDD+ Project situated in south-east Kenya, founded and run by the United States company Wildlife Works.[186] Both institutions revealed that Wildlife Works has engaged in serious human rights violations at the Kasigau Project, belying its social and ethical responsibility claims. These violations prominently include widespread sexual harassment and abuse by senior male staff, persisting over an extended duration of decades.[187] In some instances, senior male officers requested sex in exchange for job opportunities.[188] Additionally, it highlighted that a woman who refuses these demands will endure continuous verbal abuse.[189]

The above-mentioned highlights that, carbon credit projects may not be able to be relied upon to operate in good faith, and as a consequence, without comprehensive regulation, they may continue with limited accountability to burden local communities with the costs of project developer profits. The consequences of weak regulation could include:

- Increased displacement of indigenous and rural communities, who may lose their homes and ancestral lands without compensation or alternative livelihoods.
- Exploitation of local workers, who may be subjected to poor wages, unsafe working conditions, and even forced labour.

[184] Maria Hengveld "Offsetting human rights: sexual abuse and harassment at the Kasigau Corridor REDD+ Project in Kenya" (Available at https://www.somo.nl/offsetting-human-rights/). See also SONO (2023) Offsetting human rights: sexual abuse and harassment at the Kasigau Corridor REDD+ Project in Kenya (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/file:///C:/Users/u05211094/Downloads/Offsetting-Human-Rights_online-1%20(1).pdf).
[185] Tirana Hassan and Audery Gaughran "Voluntary carbon market failed the human rights test" (Available at https://www.aljazeera.com/opinions/2024/12/10/voluntary-carbon-market-has-failed-the-human-rights-test)
[186] Maria Hengveld "Offsetting human rights: sexual abuse and harassment at the Kasigau Corridor REDD+ Project in Kenya" (Available at https://www.somo.nl/offsetting-human-rights/). See also SONO (2023) Offsetting human rights: sexual abuse and harassment at the Kasigau Corridor REDD+ Project in Kenya (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/file:///C:/Users/u05211094/Downloads/Offsetting-Human-Rights_online-1%20(1).pdf).
[187] Ibid 15-22.
[188] Ibid.
[189] Ibid.

- Heightened risks of gender-based violence and exploitation, particularly in the absence of gender-sensitive policies and enforcement mechanisms.

To prevent such injustices, it is incumbent on the African states to whom these communities belong to ***prioritise adopting a just regulatory framework*** that effectively governs carbon markets, ensuring that carbon credit initiatives are equitable, transparent, and protective of human rights.

## 8. Defining a Just Framework

With the current and potential human rights injustices linked to carbon credit projects, African States need just regulatory frameworks for carbon markets. Such a framework has to be inclusive, ensuring the direct participation of small-scale farmers, rural communities, and indigenous groups most impacted by climate change. Moreover, these frameworks should ensure social dialogue, engage communities, and provide concrete and timely benefits, especially for those historically disenfranchised, marginalised, and oppressed, while also proactively involving and supporting affected individual workers.

In light of a widespread history of injustice on the African Continent due to colonialism past and present, this framework best serves its societies by proactively safeguarding these communities' land and resource rights, foreclosing human rights abuses such as land grabs or limitations on natural resources that are essential to the recuperation, preservation and fortification of their livelihoods and cultural identities. To this end, the income derived from carbon credits ought to be equitably shared, with systems established to guarantee that local communities receive financial benefits from their efforts in reducing carbon emissions projects.[190] In contrast, transparent procedures for project validation, monitoring, and verification prove essential, as they build accountability and allow both communities and investors to trust in the integrity of carbon projects based on concrete outcomes rather than hopeful projections.[191]

Prioritising high-quality, verified carbon credits that deliver real and additional emissions reductions is also central.[192] This prevents the voluntary carbon market from being undermined by low-quality credits that fail to provide actual environmental benefits, or at worst, degrade the environment.[193] Additionally, fair and consistent representation of local voices in decision-making processes must be central to the regulatory framework, giving community leaders and indigenous stakeholders actualised power to shape projects that impact their lands and resources.[194]

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[190] Law governing trading of carbon credits gazetted (21 August 2023) (Available at https://www.zimbabwesituation.com/news/law-governing-trading-of-carbon-credits-gazetted/).
[191] Ibid.
[192] African Carbon Markets (n 5), 10.
[193] Ibid.
[194] A Virtuous Cycle" Mangroves Conservation and Blue Carbon Initiatives in Coastal Kenya (October 2023), 7. (Available at https://reachalliance.org/wp-content/uploads/2023/10/Kenya-CaseStudy-FINAL_REPORT.pdf). See also A 'triple win' project for climate, community, and biodiversity conservation (available at https://mikokopamoja.org/).

A just framework is moreover, by definition, one that recognises and integrates indigenous and local knowledge systems into the planning and managing of carbon projects.[195] By valuing these unique insights built through a historical relationship with the land, carbon market initiatives become more sustainable, ethnically respectful, and optimally effective, aligning with local practices and building stronger community support.[196] In this way, a just regulatory framework seeks out mechanisms by which to foster both environmental integrity and economic development as reciprocal goals, enabling Africa's voluntary carbon market to realise its full socio-economic and environmental potential in ways that can be observed to reinforce its societies for the long term.

Overall, a just regulatory framework for carbon markets in Africa centres on the proactive pursuit of equity, inclusivity, accessibility, and transparency for local communities and those that are most affected by climate change. Such a framework ought to actively ensure the participation of small-scale farmers, rural communities, and indigenous groups, protecting their land and resource rights so as to avoid any instance of land dispossession, or any restriction to access to vital resources integral to either their livelihoods or cultural identities.[197]

[195] Ibid.
[196] Ibid.
[197] UN General Assembly: Resolution adopted by the Human Rights Council on 14 July 2021 (UN Doc A/HRC/RES/47/24), at 1 "when taking action to address climate change, respect, promote and consider their respective obligations with regard to human rights, the right to health, the rights of indigenous peoples, local communities, peasants, migrants, children, persons with disabilities and people in vulnerable situations, including people living in small island developing States and least developed countries."

# 9. Regulating Carbon Markets in Africa

Verra stands as the leading institution regulating the sale and purchase of carbon credits and addressing rights-related contestations. Nearly all carbon credits in Africa are certified by Verra, which, in addition to their role in certifying carbon credits, has also provided a certain degree of clarity regarding regulatory standards.[198] This is particularly beneficial given Africa's limited regulatory framework for the trade of carbon credits. However, it is important to recognise that, while Verra provides certification and promotes improved methodologies, processes, and regulatory standards, it lacks the accountability mechanisms typical of legally binding regulations in the countries in which it operates, as it is a self-appointed organisation. Given the above, Verra's role certifying and regulating carbon credits must be carefully considered in terms of its relationship with relevant domestic legislation.

## 9.1 Verra's Human Rights Policy

Verra's Human Rights Policy commits to respecting and promoting human rights within its operations and relationships, grounded in principles from major international human rights standards, such as the Universal Declaration of Human Rights.[199] This policy addresses key policy elements that highlight the importance of inclusivity, labour rights, access to information and anti-exploitation. On paper, this human rights policy highlights that Verra opposes discrimination and harassment, supporting equitable treatment for all involved.[200] Verra takes a vocal stand against forced labour, human trafficking, and child labour, and supports responsible labour practices.[201] Notably, although the policy is not able to legally reinforce protections for land rights or guarantee procedural justice in land disputes, Verra still 'expects' compliance from partners, and monitors potential human rights risks, promoting accountability in supply chains.[202]

This policy primarily protects Verra's employees within Verra's own operations by upholding standards for fair treatment, anti-discrimination, and labour rights within the organisation. In doing so, the policy aims to protect affected communities and indigenous groups indirectly, as it mandates responsible conduct from Verra's business partners and opposes human rights

[198] See data from 'Climate Action Data Trust'Available at https://data.climateactiondata.org/search/projects )
[199] VERRA Human Rights Policy (August 2023), 1 (Available at https://verra.org/about/overview/#advisory-committees ).
[200] Ibid, 2-4.
[201] Ibid.
[202] Ibid.

abuses like forced labour, child labour, and discrimination.[203] This includes stakeholders involved in or affected by carbon projects.[204] The policy also aims to protect local stakeholders associated with Verra's programmes, who can use Verra's grievance mechanisms to report human rights concerns, fostering a certain level of accountability.[205]

Importantly, however, while Verra's human rights policy aligns with certain elements of justice, particularly in specifically addressing labour and anti-discrimination practices, it lacks all-important enforceable protections specifically tailored to land and resource rights for African rural communities and indigenous groups.[206] Therefore, while it supports inclusivity and transparency in spirit, Verra's Human Rights Policy may fall short of fully embodying a just regulatory framework for Africa's unique carbon market challenges where it lacks the concrete legal mechanisms for enforcing land rights and safeguarding local participation. The policy lacks enforceable measures, cultural protections, and participatory mechanisms crucial to addressing the vulnerabilities of African communities directly impacted by carbon projects.

### 9.2 Verra's Grievance Redress Policy

Verra's Grievance Redress Policy aims to provide a timely, impartial resolution of grievances related to its programmes.[207] It accommodates complaints from local stakeholders, including affected communities and indigenous groups, thereby supporting both inclusivity and transparency.[208] This policy states that the following groups are able to file complaints: local stakeholders, for example, affected communities and indigenous groups, project proponents and authorised representatives, national authorities, registry users, and unrelated parties, such as individuals without contracts with Verra but affected by projects.[209] The complaints can raise issues such as impacts of projects, human rights violations, violations of programme rules, or disputes regarding rights in carbon projects.[210]

The policy defines eligibility and the necessary details for filing a grievance, such as contact information, project details, and evidence. This clarity promotes transparency, allowing

[203] VERRA Human Rights Policy (August 2023), 4.
[204] Ibid., 2-4.
[205] Ibid.
[206] Id, 4.
[207] VERRA Grievance Redress Policy – Version 1.2 (September 2024) , 1 (Available at https://verra.org/about/overview/#advisory-committees ).
[208] Ibid., 4.
[209] Ibid.
[210] Ibid 2.

affected individuals and communities to understand their rights and how to lodge complaints.[211] Complaints are processed in structured steps, with timelines for an acknowledgement (within 30 days), response (within two months for a draft, three months for a final response), and communication with complainants.[212] Verra commits to informing complainants about the status of their grievances, further fostering transparency and procedural reliability.[213]

If unsatisfied, complainants may appeal decisions. Appeals are reviewed by a separate committee, including Verra staff not involved in handling the original complaint, therein enhancing impartiality.[214] Complainants may request confidentiality, and Verra covers the process costs to prevent financial barriers to grievance filing.[215] These aspects aim to support an inclusive and accessible grievance process, even though Verra's lack of legally binding authority could limit enforcement if complex or rights-related grievances arise.[216] Additionally, it is important to note that the policy focuses on resolving grievances within Verra's frameworks, rather than providing formal legal recourse. While it may offer a means of redress, it does not provide enforceable justice in the same way a legal ruling might. Instead, it provides procedural support for complaints related to Verra's programmes.

### 9.3 Verra's Anti-Corruption Compliance Policy

Verra's Anti-Corruption Compliance Policy details its commitment to transparency and integrity, prohibiting all forms of bribery, kickbacks, and other corrupt practices.[217] Through this policy, Verra mandates comprehensive due diligence for third-party engagements, focusing on riskier relationships, such as those involving government officials or regions with high corruption indices. This includes checking for 'red flags' such as unusual payment requests, questionable business partner reputations, or third-party resistance to due diligence.[218] For instance, Verra requires assessments of third parties before forming business relationships, particularly in high-risk transactions or countries.[219]

[211] VERRA Human Rights Policy (August 2023), 5.
[212] Ibid., 6.
[213] Ibid.
[214] Ibid., 6-7.
[215] Ibid.
[216] Id, 7 "This Policy is not intended to substitute, circumvent, or override the legal rights of any party within its local jurisdiction to use judicial mechanisms, where available and appropriate".
[217] VERRA Anti-Corruption Compliance Policy (August 2024), 1 (Available at https://verra.org/about/overview/#advisory-committees ).
[218] Ibid, 6 – 8.
[219] Ibid, 7.

The policy requires accurate and complete financial records in order to prevent fraudulent or opaque financial transactions. Misrepresentation or falsification of records is strictly prohibited in order to uphold transparency.[220] Verra mandates employee training and periodic policy reviews to keep pace with evolving legal standards and risk factors.[221] Employees are required to report any suspected corrupt activity, and Verra commits to investigating all reported violations.[222]

The policy ensures protection for employees reporting suspected corruption, prohibiting any retaliation against whistle-blowers.[223] This aligns with Verra's commitment to maintaining ethical standards without pressuring employees to overlook red flags.[224] Violations of the policy can result in severe disciplinary measures, including termination of employment and legal consequences for employees involved in corrupt activities.[225]

While this policy supports a corruption-free environment that aligns with basic principles of a just regulatory framework, it falls short of directly addressing the participatory, equity, and land rights protections critical for rural communities and indigenous groups in African carbon markets. For greater justice, the policy could integrate more protections for vulnerable stakeholders, ensuring transparency and safeguarding their resource rights against potential misuse by powerful actors in carbon market transactions. Therefore, although it promotes integrity and transparency, the policy is primarily internal and does not directly empower local communities, small-scale farmers, or indigenous groups affected by carbon markets in Africa. Therefore, while it protects against corrupt practices, it does not fully embody a just regulatory framework that centres on equity, accessibility, or community participation. The section to follow observes the organisation from outside its own framing.

Two pertinent examples illustrate that the mere existence of policies does not guarantee their effectiveness. The first example demonstrates how, at first glance, Verra appears to be functioning as intended, with policies in place that suggest an effective system. **"Verra in Action".** However, the second example reveals the shortcomings of these policies, showing that their existence alone is insufficient to ensure meaningful impact. **"Verra's Inaction"**

[220] VERRA Anti-Corruption Compliance Policy, 6.
[221] Ibid., 9.
[222] Ibid.
[223] Ibid., 2
[224] Ibid.
[225] Ibid., 10.

**Verra In Action**[226]

Verra's suspension of carbon credits from Kenya's Northern Rangelands Trust (NRT) was a significant move that followed investigations into concerns about the environmental and social impacts of the offset project. The project aimed to generate carbon credits by managing grazing patterns in pastoralist communities to prevent land degradation and improve carbon storage. However, the "leakage" issue, where livestock periodically moved outside project boundaries, raised doubts about the accuracy of reported carbon savings. This leakage suggested that some of the carbon storage gains might be lost or overstated due to livestock roaming, a factor that undermined the offset project's credibility and compliance with Verra's standards.

The NRT project faced additional scrutiny from indigenous and local communities, who argued that traditional grazing practices were disregarded in the project design. Some community leaders voiced that their traditional land stewardship methods were inherently sustainable, and they felt the project imposed external control over their land without fully respecting indigenous knowledge. This disregard for traditional practices sparked concerns about potential "green colonialism," where projects could inadvertently prioritise carbon storage goals over local needs and land rights.

In response, Verra initiated a reassessment, considering the unique complexities of pastoral systems, which are typically open and not easily managed within fixed boundaries. Verra's move to suspend credits and review the project indicates an effort to uphold environmental and social integrity standards while addressing legitimate criticisms from community stakeholders. The reassessment process will likely inform Verra's future guidelines on carbon projects in pastoralist settings, where managing leakage and respecting indigenous practices pose unique challenges.

This case highlights broader issues in Africa's carbon markets, where carbon offset projects often intersect with complex socio-environmental dynamics that cannot be divorced from historical and political context – particularly as this pertains to land rights. While Verra's suspension underscores a commitment to transparency and adaptability, it also reveals the ongoing need for frameworks that protect indigenous rights, ensure accurate carbon accounting, and integrate traditional land management practices into offset models.

[226] Ashoka Mukpo 'Carbon Credits from award-winning Kenyan offset suspended by Verra' (21 March 2023) (Available at https://news.mongabay.com/2023/03/carbon-credits-from-award-winning-kenyan-offset-suspended-by-verra/ ). See also Akil Kasibhai " Kenya raises concerns about land displacement and human rights violations" (15 April 2024) (Available at https://storymaps.arcgis.com/stories/4186114e8521427387bdbc192c40be76 ).

**Verra's Inaction**[227]

The Kariba REDD+ project in Zimbabwe represents one of Africa's largest carbon offset initiatives.[228] This project spans approximately 785,000 hectares across four districts in the north west region of Zimbabwe along the southern shore of Lake Kariba.[229] Launched in 2011, the project was developed by Carbon Green Africa (CGA) and was certified under VERRA's Verified Carbon Standard (VCS) and Climate, Community, and Biodiversity (CCB) Standards.[230] It aims to reduce deforestation and forest degradation while promoting sustainable development for local communities.[231]

Investigations revealed that VERRA's oversight and soft regulatory approach allowed for the violation of labour rights affecting Chinese rice farm labourers. Research indicated that Chinese labourers worked excessive hours without adequate breaks, proper safety equipment, or appropriate accommodation.[232] Workers reported significant differences between contracts signed in China and actual working conditions in Zimbabwe.[233] Additionally, salaries were reportedly below Zimbabwe's minimum wage requirements.[234] Additionally, despite Verra having a grievance policy, workers had limited or no access to effective complaint procedures, particularly given language barriers and isolation.[235] Despite documented violations, Verra's response proved slow and ultimately inadequate, allowing the project to retain its certification.

Verra's inaction in this regard highlights a ***critical gap between policy and practice.*** While the organisation has an ostensible Human Rights Policy, a Grievance Policy, and an Anti-Corruption Compliance Policy, these commitments appear largely theoretical. In practice, there is a clear lack of full accountability for human rights violations occurring in the field, raising concerns about the effectiveness and enforcement of these policies. Furthermore, Verra's

[227] See also Verra Statement on the New Yorker Article of October 16, 2023 with regards to the Kariba project in Zimbabwe. (available at https://verra.org/verra-statement-on-the-new-yorker-article-of-october-16-2023/#:~:text=It%20will%20not%20be%20possible,the%20allegations%20in%20this%20piece.)

[228] Kariba REDD+ project in Zimbabwe: Available at https://assets.ctfassets.net/97nxevqgbpm9/5WcRGUQCffQUAA6yOj4Lu7/48c8239379415379ef4d1c42fd81e8c2/Kariba_Redd__Forest_Protection.pdf See also Kariba REDD+ project https://carbongreenafrica.net/kariba-redd-project/ . See also Verra Statement on the New Yorker Article of October 16, 2023 with regards to the Kariba project in Zimbabwe. (available at https://verra.org/verra-statement-on-the-new-yorker-article-of-october-16-2023/#:~:text=It%20will%20not%20be%20possible,the%20allegations%20in%20this%20piece.)

[229] Ibid.

[230] Ibid.

[231] Ibid.

[232] Human Rights Watch. (2019). "The Price of Carbon: Human Rights Abuses in Carbon Offset Projects." This report documented labor violations in several major carbon projects, including Kariba. See also Li, X., & Wang, H. (2018). "Chinese agricultural investments in Africa: Stakeholder perspectives from Zimbabwe." China Agricultural Economic Review, 10(4), 670-687.

[233] Ibid.

[234] Ibid.

[235] Ibid.

standards and policies placed emphasis on local community impacts, they demonstrate significant gaps concerning protections for migrant labour. This is of distinct concern considering the scale of the organisation's current reach.

It also highlights that a ***just regulatory framework*** must be shaped in action, not merely in an abstraction. Effective regulation requires more than policy creation, but instead demands robust enforcement, transparency, and meaningful engagement with affected communities to ensure real-world impact.

# 10. Comparative Analysis of Regulatory Approaches in Selected African Jurisdictions

The existence of carbon credits significantly influences corporate behaviour across various sectors throughout Africa. In Rwanda and the DRC, businesses are increasingly adopting sustainable practices as a means to earn carbon credits, which has prompted a shift towards eco-friendly technologies and renewable energy sources. Companies are more likely to invest in carbon-neutral initiatives, such as reforestation and energy efficiency projects in order to reduce their carbon footprints, while benefiting financially from the sale of carbon credits. This trend not only fosters a culture of sustainability, but also enhances corporate reputations, aligning them with global climate commitments.

In South Africa and Namibia, large corporations are beginning to integrate carbon credit strategies into their business models, particularly within the mining and energy sectors. This shift is driven by both regulatory pressures and market opportunities associated with carbon pricing. Businesses are now more proactive in monitoring and managing their emissions, often engaging in partnerships with local communities to implement sustainable practices that generate carbon credits. This collaborative approach not only boosts corporate social responsibility initiatives, but also provides businesses with a competitive edge in the market by demonstrating their commitment to sustainability.

Similarly, in Kenya, Uganda, Nigeria, and Senegal, the influence of carbon credits is visible in various industries, particularly agriculture and manufacturing. Companies are increasingly recognising the economic benefits of participating in carbon markets, leading to the adoption of greener production processes and investment in renewable energy projects. The desire to attract foreign investment and enhance market competitiveness is prompting these businesses to prioritise sustainability in their operations. However, the impact of carbon credits on corporate behaviour can vary significantly, depending on the regulatory frameworks and market dynamics within each country.

In Central African countries like Rwanda and DRC, carbon credit projects have contributed to significant emissions reductions through reforestation and afforestation efforts, supporting national commitments under international climate agreements such as the Paris Agreement.[236]

[236]See https://climatechange.gov.rw/fileadmin/user_upload/Guidance_to_National_Carbon_Market_Framework.pdf. See also https://allafrica.com/stories/202211150152.html,

These initiatives not only help mitigate climate change but also provide economic benefits to local communities through job creation and sustainable resource management.

The South African government, for instance, has integrated carbon markets into its climate policies, allowing industries to offset emissions through carbon credit purchases. This mechanism encourages companies to innovate and invest in cleaner technologies, ultimately leading to a reduction in overall greenhouse gas emissions. Namibia's focus on sustainable land management practices has also resulted in the generation of carbon credits, which contribute to both climate mitigation and biodiversity conservation.

In East and West Africa, countries like Kenya, Uganda, Nigeria, and Senegal are leveraging carbon credits to meet their climate goals. Projects focusing on renewable energy and sustainable agriculture have emerged, allowing these nations to not only contribute to global emissions reduction but also foster local economic growth.[237] Carbon credits thus serve as a financial incentive for countries to align their development objectives with climate action, enabling them to tap into international climate finance mechanisms and attract investment in green technologies.

This section will present a comparative analysis of existing regulatory frameworks regulating carbon markets in Africa by examining the regulatory frameworks of Tanzania, Zimbabwe, Zambia, Kenya, Uganda, Nigeria, Rwanda, and South Africa. Taking into account each state's existing regulations, institutional bodies, provisions regarding purchasing and selling, and dispute resolution mechanisms, this section also will assess the existing regulation in light of equity, inclusivity, accessibility, and transparency in relation to the rights of local indigenous communities.

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[237] See New Vision: 'Solar Plant to Boost Uganda's Clean Energy' (15 February 2022) (available at https://www.newvision.co.ug/category/science/solar-plants-to-boost-ugandas-clean-energy-127146). See also Trees for Global Benefit Uganda: A Case Study on the Failures of Carbon Offsetting (14 November 2022) (available at https://globalforestcoalition.org/wp-content/uploads/2022/10/Informe_Uganda_2-1.pdf, Federal Ministry of the Environment: Clean Energy Initiatives (available at https://environment.gov.ng/clean-energy/#:~:text=Clean%20Energy%20Initiatives&text=The%20Renewable%20Energy%20Programme%20was,strategy%20on%20voluntary%20emission%20reduction.), Pius Ughakpoteni, Director, Corporate Affairs 'NDDC Eyes Investment in Solar Power and Carbon Credits to Combat Climate Change' (17 October 2023) (available at https://www.nddc.gov.ng/News/NewsDetails/1294 ), Robina Abuya 'Kenya's Green Leadership: Shaping Africa's Climate Future' (February 2025) (available at https://csis-website-prod.s3.amazonaws.com/s3fs-public/2025-02/250221_Abuya_Kenya_Green.pdf?VersionId=6EIEedXrW3ok3qdrMLrpbsAs8j1WLz7z, IEA: Kenya 2024 Energy Policy Review (https://iea.blob.core.windows.net/assets/98bc7ce1-b22d-48c9-9ca2-b668ffbfcc4b/Kenya2024.pdf )

Following this country-specific overview, a comparative assessment will be conducted to evaluate whether these regulatory frameworks adequately protect the rights of local and Indigenous communities involved in carbon credit projects. This analysis will focus on a comparative analysis, showing whether and how the different regulations protect the land rights of local and indigenous communities in the context of carbon markets; whether and how the different regulations contribute towards meaningful participation by local and indigenous communities; whether and how the different regulations address potential injustices and conflicts arising from carbon market activities; and lastly, a comparative analysis showing whether and how these different regulation impact women's ability to participate and benefit from these markets.

# Country-specific Approaches

## 10.1 Tanzania

### Regulatory Institutions or Bodies

Carbon markets in Tanzania are governed by the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022, and its 2023 amendments. The key regulatory institutions involved in the oversight and management of carbon markets include the Minister in the office of the Vice President (Union and Environment).[238] The Minister acts as the central authority for implementing and supervising carbon trading mechanisms in Tanzania.[239] There is also a Designated National Authority, who in this case is the minister of environment that oversees the approval of carbon trading projects.[240] Issues Letters of "No Objection" and coordinates the review and approval processes for carbon projects. Facilitates monitoring, reporting, and verification of carbon credits by means of which to ensure compliance with international protocols.[241]

Another institution is the National Carbon Project Assessment Technical Committee. Established under the regulations, it serves as an advisory body, comprising representatives from multiple sectors, including government agencies, civil society, academia, and the private sector.[242] This committee provides expert advice on carbon trading initiatives and ensures that projects align with national climate goals.[243] The National Carbon Registry Maintains records of carbon credit transactions and ensures transparency in trading.[244] The registry facilitates the tracking of acquisitions, sales, and transfers of carbon credits to avoid double counting.[245]

### Sale and Purchase of Carbon Credits

To facilitate the sale and purchase of carbon credits (carbon credit trading), projects must adhere to the prescribed project registration process. Project proponents are required to submit

[238] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 19 – 20 read together with Environmental Management (Control and Management of Carbon Trading) (Amendment) (2023), at 12. https://velmalaw.co.tz/news/control-and-management-of-tanzanian-carbon-trading-regulations-2022/
[239] See also https://www.clydeco.com/en/insights/2023/11/the-amendments-to-the-tanzania-carbon-trading-regu.
[240] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 6.
[241] National Carbon Monitoring Centre https://www.ncmc.sua.ac.tz/tanzania-carbon-trading-regulations.
[242] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 5.
[243] Ibid, see also https://www.ncmc.sua.ac.tz/tanzania-carbon-trading-regulations
[244] Ibid, at .
[245] See https://www.ncmc.sua.ac.tz/application-of-projects

an application for project idea approval, accompanied by a non-refundable fee of USD 500 for non-citizens.[246] A Project Concept Note must be developed within 90 days of registering the project idea.[247] The Designated National Authority is responsible for issuing a Letter of No Objection within 30 days upon receipt of a qualifying Project Concept note or providing recommendations for its improvement. Following this, the Project Documentation must be prepared within 12 months of obtaining the Letter of No Objection.[248] The DNA will then submit the qualifying project documents to the Minister for endorsement. Implementation of the project activities must commence within two years after receiving the endorsement.[249]

In terms of revenue-sharing for land-based projects, the Managing Authority (e.g., landowner) is entitled to 61% of gross revenues generated from carbon credit sales.[250] The Designated National Authority or National Focal Point receives 9% of the remaining 39 percent.[251] For projects with high initial investment costs, the cost and revenue-sharing arrangements may be renegotiated between the Managing Authority and the Project Proponent, with guidance from the Designated National Authority so as to ensure fairness and equity.[252]

Notably, non-compliance with these regulations constitutes an offence, punishable by fines ranging from TZS 10,000,000 to TZS 10,000,000,000 (~USD 4,000–4,000,000), imprisonment for up to 12 years, or both.[253] [see Figure 10.1]

### Dispute Resolution Mechanism

While the regulations provide an administrative framework, the available sources do not detail specific mechanisms for dispute resolution.

[246] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 23 read together with Environmental Management (Control and Management of Carbon Trading) (Amendment) (2023). (Available at https://velmalaw.co.tz/news/control-and-management-of-tanzanian-carbon-trading-regulations-2022/. See also https://velmalaw.co.tz/news/control-and-management-of-tanzanian-carbon-trading-regulations-2022/)
[247] Ibid.
[248] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 23 read together with Environmental Management (Control and Management of Carbon Trading) (Amendment) (2023).
[249] Ibid.
[250] Ibid.
[251] Ibid.
[252] Ibid.
[253] Ibid.

## The "Just" Element

### *Equity*

The regulation prescribes that revenue from carbon credits projects ought to benefit local stakeholders.[254] This theoretically centres on equitable distribution, allowing local communities to receive a portion of the carbon credit revenue. However, while the prescribed percentage appears favourable,[255] the regulation does not clarify which "local stakeholders" qualify, potentially leaving room for ambiguity, misallocation, or corruption.

It is important to note, however, that the lack of specific definitions regarding which community members benefit and how funds are allocated within these groups raises concerns about the effective realisation of equity. If not carefully managed, funds may disproportionately benefit local elites or intermediaries, reducing the intended equitable impact for marginalised communities.

### *Inclusivity*

Although the regulation involves revenue-sharing with local communities, there is limited evidence that it actively involves them in the decision-making or registration processes for carbon projects. For true inclusivity, the framework ought to involve local stakeholders, including small-scale farmers and indigenous groups, in decision-making stages, ensuring that both their needs and their depth of knowledge are made integral to project designs. Recognising REDD+ projects reflects an acknowledgement of forest-based carbon storage, which is significant for indigenous and rural communities reliant on forest resources.[256] However, the regulation does not specify how these groups are consulted or included in decisions regarding REDD+ projects, which may lead to unilateral decisions that could compromise traditional land use and community rights.

### *Accessibility*

The regulation mandates a registration fee of 1% of the project's expected gross annual revenue, which is assessed for the project's entire lifetime. This requirement, along with a complex

[254] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 19 – 20 read together with Environmental Management (Control and Management of Carbon Trading) (Amendment) (2023), at 12.
[255] See It starts at 61% and is thereafter mitigated and divided into other percentages assessed downwards from here) See Regulation 2022, 11 – 12.
[256] Regulation 2022, 15.

registration process, poses barriers to entry for smaller projects that might lack the capital or administrative resources to navigate this framework.[257] Simplifying the registration process could make the regulatory framework more accessible without compromising oversight. Such amendments would be crucial to ensuring that smaller community projects actually have access benefits under the current framework.

***Transparency***

The regulations establish a national carbon registry,[258] which constitutes a positive step toward transparency. However, the framework could be improved by ensuring public access to registry information, allowing communities themselves to directly verify project approvals, revenue allocations, and carbon credit flows. The open-ended and broad list of reasons for project endorsement cancellation introduces uncertainty.[259] This lack of clear, detailed guidelines could lead to politically influenced decisions, deterring investment, and creating instability in project governance, which may ultimately erode trust among community stakeholders and investors.

***Land and Resource Rights***

The regulations currently lack robust protections to prevent land dispossession or restricted access to resources vital to local livelihoods. Without explicit safeguards, communities could face restricted access to forests or land areas designated for carbon projects, affecting their traditional rights and ways of life. For a just framework, the regulation would benefit from more specific protections to prevent land rights violations, ensuring communities are neither forcibly displaced nor deprived of resources upon which they depend. Additionally, the regulation does not indicate mechanisms for integrating traditional knowledge or land stewardship practices. For example, recognising indigenous land management techniques could enhance both project efficacy and community alignment, minimising conflict between project demands and cultural practices.

***Implementation and Enforcement***

[257] Regulation 2022, 10. Amendment 2023, 11.
[258] Regulation 2022, 22-23. Amendment 2023, 3.
[259] Regulation 2022, 19.

Effective implementation would require coordination among various national regulators, including the Bank of Tanzania and the Tanzania Revenue Authority.[260] The current regulatory setup appears fragmented, which could lead to regulatory bottlenecks and inconsistencies, particularly in enforcing revenue-sharing and community protection provisions. The framework's reference to incorporating Article 6 of the Paris Agreement,[261] shows an openness to international collaboration. However, clear domestic guidelines are necessary to ensure these mechanisms reflect local needs and provide the protections necessary for vulnerable communities.

## Conclusion

Tanzania's national carbon market regulations have made certain strides toward creating a regulated carbon market, but fall short. The regulation would benefit from explicit provisions for community involvement in decision-making processes, clearer definitions of local stakeholders eligible for revenue shares, reduced administrative barriers for smaller projects, and enhanced protections for land and resource rights by means of which to prevent potential land dispossession. While the framework is promising, a truly just regulatory approach would require far greater transparency, concrete protections for traditional land uses, and simplified procedures that do not fail to include small or indigenous-led projects.

[260] See Bank of Tanzania (Available at https://www.bot.go.tz/ ). See also Tanzania Revenue Authority (Available at https://www.tra.go.tz/ ).
[261] See Article 6 of the Paris Agreement (2015).

## 10.2 Zimbabwe

### Regulatory Institutions or Bodies

The carbon credits are regulated in terms of Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023. The regulations designate the Designated National Authority, which is housed within the Climate Change Management Department.[262] This body manages carbon credit projects, maintains the Zimbabwe Carbon Credit Registry, and ensures compliance with international standards such as Article 6 of the Paris Agreement.[263] It also tracks the full carbon credit trading cycle and ensures environmental integrity.[264] Another body is the Carbon Credit Trading Committee, which was established by the Minister of Climate Change Management.[265] This body provides expert policy, technical advice, and recommendations regarding carbon markets.[266] It advises on national strategic interests where carbon credit trading may not be conducted. There are also Carbon Credit Issuing Bodies Entities that are authorised to issue carbon credits for verified reductions or removals.[267]

### Sale and Purchase of Carbon Credits

According to the regulations, all carbon credit projects must be registered with the Designated National Authority, which issues Letters of No Objection, verifies project compliance, and authorises credit issuance.[268] This registration is important as it is a necessary step for the sale and purchase (carbon trading) of carbon credits.[269] Additionally, credits must be registered in the Zimbabwe Carbon Credit Registry, which records transactions, ensures traceability, and prevents double counting.[270] Registration includes submitting a Project Design Document, a Measurement, Reporting, and Verification schedule, and adherence to sustainability guidelines.[271] The regulation highlights that carbon credits can be traded in compliance markets in terms of Article 6.2 and 6.4 under the Paris Agreement or voluntary carbon markets.[272] Importantly, proceeds from carbon credit sales are divided into a 70% share retained by the

[262] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1016.
[263] Ibid.
[264] Ibid.
[265] Ibid., 1017-1028.
[266] Ibid.
[267] Ibid., 1020.
[268] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1016.
[269] Ibid.
[270] Ibid., 1024.
[271] Ibid., 1020.
[272] Ibid., 1028.

project proponent and a 30% Environmental Levy, which funds climate adaptation, low-carbon projects, and administrative costs.[273] [see figure 10.2]

### Dispute Resolution Mechanisms

The regulations outline processes to address conflicts by highlighting the administrative appeals process, where aggrieved parties can appeal decisions made by the Designated National Authority to the Minister within 30 days after the letter of objection has been issued.[274] Decisions may include objections to project approval or permit cancellations.[275] The Minister's decision can further be reviewed by the Administrative Court, providing a secondary layer of legal oversight. [276]

### The "Just" Element

#### *Equity*

Zimbabwe's regulations outline that a percentage of revenue from carbon credit sales should benefit local communities.[277] This indicates an intent to share the financial benefits of carbon markets with those directly affected. However, specific details on how revenues are divided or managed within communities are often too vague to apply.[278] For true equity, the regulation would ideally specify the distribution of funds within communities, ensuring that the most vulnerable receive support, rather than funds concentrated among local elites or intermediaries. Equity would also require active measures to include indigenous and rural groups in project benefits. The regulation does not yet fully address the distribution of benefits to marginalised groups specifically, which could result in unequal outcomes across different demographics within affected communities.

#### *Inclusivity*

While the regulation mandates that projects must consult local stakeholders, it does not clarify the level of community engagement required.[279] Effective inclusivity in carbon credit projects would involve communities not only in consultations but in decision-making processes,

[273] Ibid., 1021 – 1022.
[274] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1025 -1026.
[275] Ibid.
[276] Ibid.
[277] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1021 – 10122.
[278] Ibid.
[279] General Regulation 2023, 1027.

particularly in project design and monitoring. There is limited emphasis on indigenous knowledge or traditional land management practices, which are critical to an inclusive and culturally respectful approach. Although the regulation acknowledges community involvement, it is often project developers and local government authorities who dominate project oversight.[280] Without explicitly prioritising voices from small-scale farmers and indigenous groups, the regulation may fall short in ensuring that diverse community perspectives are genuinely represented.

***Accessibility***

The registration and compliance processes can be administratively complex and financially burdensome, which can deter smaller, community-led projects.[281] For example, fees and regulatory procedures may discourage small stakeholders from participating in carbon projects, where they may lack the resources to navigate these barriers effectively. The regulation could better support accessibility by reducing administrative costs and simplifying compliance requirements for local or smaller-scale initiatives. Establishing a support system for local communities to meet regulatory requirements would improve accessibility, allowing community-led projects to flourish alongside larger commercial initiatives.

***Transparency***

Zimbabwe's framework includes a carbon registry, which is a positive step toward transparency.[282] However, ensuring that this registry is accessible to the public, including communities, could greatly enhance transparency, allowing stakeholders to track carbon credits, project details, and revenue allocations. This transparency is key to building community trust and ensuring accountability in carbon market operations. The regulation includes broad criteria for project approval and continuation, which introduces uncertainty for developers and community stakeholders.[283]Ambiguities in the regulation, especially around the grounds for project revocation, could lead to discretionary interpretations and reduce transparency. Clear guidelines on project requirements and public disclosure of project performance could mitigate this risk and strengthen regulatory integrity.

[280] Ibid.
[281] Ibid., 1035.
[282] Ibid.,1024.
[283] Ibid., 1019.

### *Land and Resource Rights*

Zimbabwe's regulations are not fully clear on protections for land and resource rights, an area critical for the well-being of rural and indigenous communities. Without explicit protections, there is a risk that communities could face restricted access to land or resources integral to their livelihoods. Ensuring that carbon credit projects respect existing land tenure and community rights would protect against potential dispossession. For a more just approach, the regulation could incorporate provisions that protect indigenous land uses and recognise traditional knowledge systems. Incorporating traditional land practices not only respects cultural identities but can also enhance the environmental outcomes of projects, as these practices often align with sustainable land stewardship.

### *Implementation and Enforcement*

Implementation of the regulation requires coordination between national authorities and local communities, as well as consistent enforcement across various levels of government.[284] Effective enforcement would require oversight mechanisms that protect community interests, while also ensuring that projects adhere to environmental and social standards. Unclear enforcement provisions and the potential for political influence in regulatory decisions can introduce risks to both community stakeholders and project developers. Greater transparency in enforcement and monitoring could mitigate these risks, providing assurance to communities and investors alike.

## Conclusion

Zimbabwe's Carbon Credits Trading (General) Regulations, 2023 demonstrate progress in creating a structured carbon market but fall short of fully meeting the criteria of equity, inclusivity, accessibility, and transparency for local communities. Therefore, while Zimbabwe's regulatory framework is a step forward in developing a national carbon market, it requires further refinement to ensure that local communities, particularly rural and indigenous groups, are empowered, protected, and genuinely included in the carbon market benefits. Thus, specific attention ought to be given to strengthening revenue-sharing guidelines to specify equitable distributions within communities. Attention should also be given to simplifying the compliance processes to enable greater participation by small-scale, community-led projects and to provide public access to the carbon registry to enhance transparency. The framework

[284] Ibid., 2020 & 2025 (see appeals procedure).

should also establish clear protections for land and resource rights to safeguard community access and prevent dispossession. As well as integrate traditional knowledge into project design to support and respect indigenous practices.

## 10.3 Zambia

### Regulatory Institutions or Bodies

The Forest (Carbon Stock Management) Regulations, 2021, under Zambia's Forests Act, 2015, provide a framework for regulating carbon markets in Zambia. The key regulatory bodies under these regulations include the Director of Forestry, who oversees the administration of carbon stock permits and projects and ensures compliance with national and international forestry standards.[285] The director also manages the national register for carbon projects, tracks transactions, and coordinates the integration of projects into jurisdictional-level programmes.[286]

### Sale and Purchase of Carbon Credits

Zambian regulations have created a permit system by which a permit is required for any entity engaging in carbon market projects.[287] These permits allow for the purchase and sale of carbon credits.[288] Permits are issued after the applicant demonstrates compliance with safeguards, benefit-sharing plans, and transparency in accounting.[289] Government agencies, businesses, NGOs, community forest management groups, and private entities can participate, provided they meet regulatory requirements as per the regulations.[290] [see figure 10.3]

### Dispute Resolution Mechanisms

The regulation itself does not have a dispute resolution mechanism. However, it does highlight that each carbon project must include a grievance redress mechanism as part of its project design.[291] This ensures communities and stakeholders can resolve issues related to benefit-sharing, transparency, or environmental impacts.[292] Furthermore, the regulation highlights that Permits can be revoked if obtained through fraud or if holders violate terms or conditions.

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[285] Forest (Carbon Stock Management) Regulations SI No. 66 of 2022, 600-605. See also the Supplementary Interim Guidelines from the Ministry of Green Economy and Environment (2023)(the Guidelines) (available at https://www.moiramukuka.com/wp-content/uploads/2022/12/INTERIM-GUIDELINES-FOR-CARBON-MARKETS-AND-TRADING-ARTICLE-MOIRA-MUKUKA.pdf )

[286] Forest (Carbon Stock Management) Regulations SI No. 66 of 2022, 600-605. See also the Supplementary Interim Guidelines from the Ministry of Green Economy and Environment (2023)(the Guidelines).

[287] Ibid.

[288] Ibid.

[289] Ibid.

[290] Ibid., 600.

[291] Forest (Carbon Stock Management) Regulations SI No. 66 of 2022, 612.

[292] Ibid 612 "The permit holder shall develop a project or programme design, emission document or emission reduction document or related document depending on the carbon standard and the said document shall contain full information regarding the areas, size, benefit sharing plan, redress mechanism, obligations of the permit holder and all other environmentally and fiduciary information"

Permit holders are given notice and allowed to respond before enforcement action is taken.[293] Additionally, as part of the responsibilities of the Director, the Director has to oversee disputes that arise regarding permits, transactions, or benefit-sharing agreements; the Director of Forestry mediates and takes corrective action.[294]

## The "Just" Element

### *Equity*

The regulation encourages community forest management groups to engage in carbon trading, which promotes equity by potentially providing financial benefits directly to communities involved in forest conservation.[295] This is a positive aspect, as it recognises the role of local communities in protecting carbon stocks and offers them a share of the resulting benefits.

However, the regulation's focus is limited to forest-related carbon activities (such as reducing deforestation and forest degradation),[296] which restricts the scope of participation to communities involved in forest management. This limitation may exclude other communities that could benefit from broader carbon activities, such as those related to renewable energy or low-carbon infrastructure projects. The interim guidelines address this by expanding the eligible project types, though these guidelines remain advisory and lack the regulatory force to ensure equity across different community interests.[297]

### *Inclusivity*

The regulation actively encourages community forest groups to engage in carbon trading, which promotes inclusivity by bringing community-based stakeholders into the carbon market.[298] By structuring the regulation to allow local community groups to participate, it recognises its role in carbon conservation efforts.

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[293] Ibid.
[294] Ibid., Zambia 600–606.
[295] Forest (Carbon Stock Management) Regulations SI No. 66 of 2022, 599. The Supplementary Interim Guidelines from the Ministry of Green Economy and Environment (2023)(the Guidelines) (available at https://www.moiramukuka.com/wp-content/uploads/2022/12/INTERIM-GUIDELINES-FOR-CARBON-MARKETS-AND-TRADING-ARTICLE-MOIRA-MUKUKA.pdf )
[296] Carbon Stock Management (2022), 598.
[297] Zambia's Ministry of Green Economy and Environment issued interim guidelines for the handling of carbon markets and trading in Zambia. Guidelines cover a broader range of eligible carbon projects, unlike the Forests Carbon Stock Management Regulations.
[298] Carbon Stock Management (2022), 598.

True inclusivity requires that all stakeholders, including small-scale farmers and communities not directly involved in forest management, have pathways to participate in carbon projects. The interim guidelines offer a broader inclusivity approach by allowing projects in renewable energy and other areas, which could include a wider variety of stakeholders. However, these guidelines are not binding regulations, which limits their enforceability. For more comprehensive inclusivity, the Forest Carbon Regulations would ideally adopt binding provisions that reflect the guidelines' broader project eligibility.

***Accessibility***

The regulation lays out a specific procedure for forest carbon project registration and carbon stock trading.[299] While this provides structure, administrative requirements could pose barriers to smaller community groups or local stakeholders with limited financial or technical resources. The interim guidelines, by broadening project types, could facilitate accessibility for various stakeholders beyond forest-based projects.[300] However, without a simplified, community-friendly application and registration process, access may remain limited for grassroots and small-scale community projects. A more accessible framework would involve reduced administrative fees, streamlined registration, and technical support so as to empower smaller community groups to participate fully in the carbon market.

***Transparency***

The regulations establish a procedure for forest carbon stock trading, which can provide a degree of transparency by formalising project approval, monitoring, and verification.[301] However, there is limited information available on whether the regulation mandates a transparent public registry or regular reporting on project performance, financial flows, and community impacts. Transparent access to such data is essential to build trust with local stakeholders and ensure accountability. The interim guidelines aim to align Zambia's carbon market practices with international standards, suggesting a commitment to transparency in terms of adhering to recognised best practices.[302] However, they do not establish mechanisms for the public disclosure of project information or community impacts, limiting transparency

[299] Carbon Stock Management (2022), 605.
[300] Guidelines (n 162).
[301] Carbon Stock Management (2022), 600-605.
[302] Guidelines (n 162).

for local stakeholders who may wish to monitor the benefits and environmental impacts of nearby carbon projects.

### *Land and Resource Rights*

Although the regulations encourage community involvement in forest carbon projects, they lack explicit provisions to protect local land and resource rights. Effective protection would require clear stipulations that prevent land dispossession or restricted resource access for communities involved in or affected by carbon projects. While the regulations promote forest management, they do not explicitly integrate or recognise indigenous and traditional land management practices, which are often vital for sustainable land use.[303] Including traditional practices would enhance the regulation's respect for cultural heritage and contribute to the effectiveness of forest conservation efforts.

## Conclusion

Zambia's carbon market regulations demonstrate an intent to involve local communities in forest-based carbon projects. However, there are several evident gaps. By restricting carbon activities to forest-related projects, the regulation excludes other community-relevant carbon projects (such as renewable energy), potentially limiting the range of beneficiaries. Although interim guidelines have extended the scope, their non-binding nature reduces enforceability. Complexity in the application process could limit accessibility, particularly for smaller community groups. Simplifying the administrative requirements could allow more local projects to participate effectively. For increased transparency, the regulations could incorporate a public registry and clearer reporting requirements for project performance and revenue distribution, allowing local communities to track benefits and hold project operators accountable. To fully respect equity and inclusivity, the regulations would benefit from stronger protections against land dispossession and explicit recognition of indigenous land stewardship practices.

[303] Guidelines (n 162).

## 10.4 Kenya

### Regulatory Institutions or Bodies

Based on its rich biodiversity and commitment to sustainable development, Kenya is increasingly recognised as a leader in carbon credit markets within Africa. The country has implemented various policies and initiatives aimed at reducing greenhouse gas emissions and promoting renewable energy, including the National Climate Change Action Plan and the Energy Act. Kenya's renewable energy sector, particularly in wind, solar, and geothermal energy, plays a crucial role in generating carbon credits. The country's ambitious goal to achieve 100% green energy by 2030 aligns with its efforts to participate in international carbon markets, thus enhancing its potential for carbon credit generation.[304]

Kenya's 2024 Climate Change (Carbon Markets) Regulations establish several key bodies to oversee and regulate carbon markets in Kenya.[305] The first is the Designated National Authority (DNA), which manages carbon project approvals, reviews concept notes and issues letters of "No Objection" or project approval.[306] The DNA oversees compliance with national and international standards, including Articles 6.2 and 6.4 of the Paris Agreement. The DNA also maintain the national carbon registry, which records all carbon credit transactions in Kenya.[307] A climate change directorate also advises the government on carbon market policies and ensures stakeholder compliance. It also coordinates public awareness and research on carbon markets in Kenya.[308] The regulation also makes mention of a multi-sectoral technical committee that provides technical advice on carbon project assessments and compliance. This includes representatives from various sectors, such as energy, transport, forestry, and waste management in Kenya.[309] Lastly, the regulation also highlights the ad hoc committees, which are specifically constituted to review project documents and provide recommendations to the DNA.[310]

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[304] Robina Abuya 'Kenya's Green Leadership: Shaping Africa's Climate Future' (February 2025) (available at https://csis-website-prod.s3.amazonaws.com/s3fs-public/2025-02/250221_Abuya_Kenya_Green.pdf?VersionId=6EIEedXrW3ok3qdrMLrpbsAs8j1WLz7z. See also IEA: Kenya 2024 Energy Policy Review (https://iea.blob.core.windows.net/assets/98bc7ce1-b22d-48c9-9ca2-b668ffbfcc4b/Kenya2024.pdf )

[305] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 2024, 1191.

[306] Ibid.

[307] Ibid.

[308] Ibid., 1191 -1192.

[309] Ibid., 1192.

[310] Ibid.

### Sale and Purchase of Carbon Credits

According to the regulation, each carbon credit shall be traded in accordance with the provisions of section 23C of the Act.[311] The sale and purchase of carbon credits must be registered with the National Carbon Registry to prevent double counting and ensure transparency.[312] Credits must undergo validation, certification, and independent verification before trading.[313] The regulation also encourages revenue sharing. It states that for land-based projects, at least 40% of aggregate earnings (less costs) will be allocated as annual social contributions to communities, which promotes equitable benefits. [314] [see Figure 10.4]

### Dispute Resolution Mechanisms

The regulations explicitly address dispute resolution. Disputes arising under the regulations are resolved in accordance with Section 23H of the Climate Change Act.[315] Additionally, the regulation has what is known as the Community Development Agreements for projects on public or community land, which includes specific provisions for resolving community grievances.[316] The regulation also designates a Grievance Resolution Subcommittee to mediate and resolve conflicts between project proponents and affected communities.[317]

### The "Just" Element

#### *Equity*

The regulations specify that land-based carbon projects on public or community land are required to provide an annual social contribution of at least 40% of project earnings to the community, while non-land-based projects contribute 25 percent.[318] This provision is a positive step toward equitable distribution, as it allocates a significant portion of project benefits to the local communities affected by these projects. While the percentages are promising, the regulations do not clarify mechanisms for how these funds are allocated within communities. Without specific provisions for equitable distribution within communities, there is a risk that these contributions may not fully benefit the most vulnerable or marginalised members.

[311] The Climate Change Act CAP. 387A (2023), 21.
[312] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 2024, 1191, 1193.
[313] Ibid., 1195.
[314] Ibid., 1198.
[315] The Climate Change Act CAP. 387A (2023), 23.
[316] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 202 1218 – 1219.
[317] Ibid., 1214 – 1215.
[318] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 2024, 1198 &1199.

Ensuring that funds reach those most impacted by climate change, such as small-scale farmers and indigenous groups, would strengthen the regulation's equity focus.

***Inclusivity***

The establishment of a multi-sectoral technical committee to advise the Designated National Authority (DNA) on carbon project assessments is a significant inclusivity measure.[319] This committee includes representatives from various sectors, allowing for technical expertise across energy, agriculture, forestry, and waste management.[320] However, there is little indication that local community representatives are included in this decision-making structure. Although the regulations cover stakeholder mobilisation, they could benefit from more explicit requirements to engage local communities in both the planning and monitoring stages. True inclusivity would require mechanisms to involve local and indigenous representatives actively, ensuring that their voices are heard in key decision-making processes, especially regarding projects affecting their land and resources.

***Accessibility***

The regulations require that project proponents be legal entities with financial capacity and technical expertise in carbon markets.[321] While these criteria are intended to ensure project viability, they may create barriers for small-scale community groups or local organisations lacking financial resources or technical knowledge to meet these requirements independently. Accessibility could be improved by establishing support systems for smaller or community-led projects, such as funding assistance or technical training, to meet the stringent regulatory requirements. Simplifying administrative procedures or creating special provisions for community-led initiatives would make the carbon market more accessible to grassroots participants.

***Transparency***

The National Carbon Registry, overseen by the DNA, provides a central system for recording all carbon projects across various sectors.[322] This is a positive measure of transparency, as it

[319] Ibid., 1195 – 1199.
[320] Ibid.
[321] The Climate Change (Carbon Markets) Regulations, 1192.
[322] Ibid., 1193.

allows project tracking, and could provide the public with access to information on project approvals, revenue distributions, and compliance status.

The regulations require regular disclosure from project proponents to the DNA, covering project costs, expected emission reductions, and revenue.[323] While this is a valuable transparency measure, the regulation does not clarify whether these disclosures are available to the public, or to local communities. Publicly accessible reports on project earnings and social contributions would enhance transparency, and allow communities to monitor benefit allocations. Clear guidelines on the grounds for project rejection or cancellation would improve regulatory transparency,[324] especially for communities and investors who require certainty in long-term projects. Current provisions are somewhat broad, which could lead to discretionary decision-making without public accountability.

***Land and Resource Rights***

The requirement for social contributions on community land suggests a degree of protection for communities reliant on these lands.[325] However, the regulation does not explicitly address safeguards against land dispossession or restricted resource access, which are critical issues for Indigenous and rural communities. By differentiating between land-based and non-land-based carbon projects, the regulation opens participation to diverse project types, including community-led land management and household-level green technologies.[326] This inclusive approach broadens participation beyond traditional land-based carbon sequestration projects, allowing local and rural groups to benefit from various types of carbon-reducing activities. To fully promote and protect community rights, the regulations could include explicit provisions protecting local land tenure and resource access. Stronger protections would prevent projects from restricting communities' traditional resource rights or leading to land dispossession.

[323] Ibid., 1194 "A project proponent shall disclose to the Designated National Authority the relevant carbon project information including (a) the project costs; (b) expected emission reductions or removals at the carbon project application stage; (c) verified emission reductions and removal and estimated revenues at issuance; and (d) adherence to all applicable legal requirements in operating carbon projects".
[324] The Climate Change (Carbon Markets) Regulations, 1198.
[325] Ibid., 1198, 1210, 1215.
[326] Ibid., 1189 "land-based carbon project" means any project that involves activities related to land use, land management and ecosystem conservation or restoration that is aimed at reducing greenhouse gas emissions or enhancing carbon sequestration; "non-land based carbon project" means any activity that reduces greenhouse gas emissions or remove carbon dioxide from the atmosphere and employ technologies that do not require land for their execution and include household or institutional green technologies such as hand-held solar lighting devices, energy efficient cookstoves, water purification devices, electric-powered or green transport"

## Conclusion

Kenya's Climate Change (Carbon Markets) Regulations 2024 make considerable progress in creating a structured and equitable carbon market. Key provisions, such as the National Carbon Registry, multi-sectoral oversight, and mandated social contributions, indicate a commitment to equity, transparency, and inclusivity. However, the regulation could be improved by establishing clearer roles for community representatives within the regulatory and oversight frameworks, which would strengthen inclusivity. Reducing administrative burdens or providing support for smaller community-led projects would improve accessibility. Making social contributions and revenue data publicly available would enhance transparency, and finally, clear guidelines protecting land and resource rights for local communities would prevent potential conflicts over land use and strengthen community trust in carbon projects.

## 10.5 Uganda

### Regulatory Institutions or Bodies

Uganda is considered one of the frontrunner countries in the carbon markets on the African continent, with over 33 million carbon credits issued between both mechanisms. The NDC of Uganda stipulates a reduction of 24.7% by the year 2030, while carbon markets will be critical in achieving this target. It plans to mobilise USD 28.1 billion in international climate finance with a strategic focus on private sector engagement through carbon markets. The CDM portfolio boasts over 189 activities registered in Uganda, with high impacts on carbon credit issuance, especially in energy efficiency projects like improved cookstoves. It also hosts several programs of activities most focused on cookstoves, water purification, and biogas, with an issuance of over 16 million CERs. VCM activities in Uganda also strongly focus on energy efficiency, especially clean cooking solutions, led by Gold Standard, where big credit issuance has been justified.

Uganda's Climate Change Act 22 of 2021 regulates Uganda's national response to climate change. The Act gives effect to the UNFCCC, Kyoto Protocol and the Paris Agreement. Notably, the Act provides for participation in climate change mechanisms.[327] Section 9 empowers the Minister responsible for Climate Change matters to develop further regulations regarding participation in climate change mechanisms such as emissions trading mechanisms, voluntary emissions trading mechanisms and other mechanisms as may be prescribed by the regulations.[328] Additionally, section 23 allows the Minister to make further regulations regarding the responsibilities of private entities. Section 26 concerns climate change litigation, containing broad provisions on standing to bring cases before the High Court against the government, an individual, or private entity "whose action or omission threatens or is likely to threaten efforts towards adaptation to or mitigation of climate change". Arguably, the Act creates a legal standing to institute proceedings concerning carbon markets and carbon credits as emissions trading mechanisms to address climate change. However, there has been no litigation concerning carbon markets and carbon credits.

[327] The Act defines climate change as "mechanisms to contribute to mitigation of GHG emissions and support sustainable development and include cooperative and non-market approaches as defined under Article 6 of the Agreement."
[328] At the time of writing, these regulations had not been published.

To operationalise the provisions of the Act, the Ugandan government has drafted the National Climate Change (Climate Change Mechanisms) Regulations of 2024. However, the regulations have not been finalised. Uganda has also launched the Uganda Forestry Compensation Strategy 2024.[329] The Strategy aims to help stakeholders in promoting sustainable energy generation and utilisation while addressing the country's unique challenges in energy access, affordability, and security.[330] The strategy focuses on nature-based solutions like Afforestation, Reforestation, and Revegetation (ARR) and Reducing Emissions from Deforestation and Forest Degradation (REDD+).

Uganda's institutional arrangements are perceived to have a complex institutional framework. Arguably, no government institution is responsible for regulating the carbon markets and carbon credits. There are private entities within the Ugandan carbon market. For example, there is the Uganda Carbon Bureau (UCB). The UCB is described as a 'fair trade' company that plays a bridging role between the public and private sectors and can work on both a national and international level. The UCB is currently the only full-service carbon finance company in Uganda.

### Sale and Purchase of Carbon Credits

Uganda does not have local validation and verification bodies compared to countries like Kenya, Egypt, and South Africa. The verification of carbon projects in Uganda can be done through standards like Verra's Verified Carbon Standard.[331] Uganda has country-based exchanges or markets for carbon credits. Without standard carbon credits, companies will likely struggle to verify emission reductions.[332] The lack of a clear regulatory system is criticised for complicating the development of the VCM and ultimately leading to a lack of integrity within the market. Research indicates Uganda has not yet fully explored using policy tools to coordinate climate change or carbon market participation.[333]

[329] UBC "Uganda unveils Forestry Compensation Strategy to tackle energy sector emissions" (Available at bc.go.ug/2024/11/15/uganda-unveils-forestry-compensation-strategy-to-tackle-energy-sector-emissions/). However, at the time of compiling the report, the Strategy could not be established.
[330] Ibid.
[331] Kenneth Muhangi, "Article 6 of the Paris Agreement and the Carbon Market in Uganda" (Available at chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ktaadvocates.com/wp-content/uploads/2024/05/KTA-Article-6-of-the-Paris-Agreement-and-the-Carbon-Market-in-Uganda-.pdf).
[332] Ibid.
[333] Kenneth Muhangi, Article 6 of the Paris Agreement and the Carbon Market in Uganda.

### Dispute Resolution Mechanisms

As alluded to earlier, the Climate Change Act 22 of 2021 states that anyone aggrieved by the actions or omissions of the state, an individual or a private entity whose actions threatens or is likely to threaten efforts towards climate change adaptation or mitigation may approach the High Court.[334]

### The "Just" Element

#### *Equity*

Section 9 provides that a project proponent may, subject to the government's approval, benefit from or participate in carbon trading. This position raises both opportunities and challenges in ensuring equity for local communities. While this provision could facilitate structured engagement in carbon markets, it also poses risks of exclusion and unequal distribution of benefits, affecting the justice element of equity in Uganda's carbon credit system. Therefore, proposed regulations ought to ensure that the local communities equally benefit from carbon trading. For instance, it is alleged that over 22,000 small-scale farmers holding land titles were forcibly displaced from the Mubende and Kiboga districts to accommodate the REDD+ project funded by the UK-based New Forests Company.[335] This underscores concerns about human rights violations and the exclusion of local communities who are denied the chance to benefit from projects conducted on their land. This is fundamentally an abuse of power on the part of large corporations or state authorities, where equity is undermined for indigenous or rural communities.

#### *Inclusivity*

Section 5 of the Climate Change Act 22 of 2021 mandates the government to develop a Ugandan Framework Strategy on Climate Change, emphasising the need to integrate scientific and indigenous knowledge to address climate change challenges. In doing so, the government must explicitly consider the resilience and adaptation needs of vulnerable and marginalised groups, ensuring that their voices, experiences, and solutions are central to national climate action. Additionally, the Strategy requires a gender-sensitive and human rights-based

[334] Section 26 of the Climate Change Act 22 of 2021.
[335] Damilola S. Olawuyi, 'Fostering Accountability in Large-Scale Environmental Projects: Lessons from CDM and REDD+ Projects' (2015) 6 World Bank Legal Rev 1

approach, recognising the differential impacts of climate change on women, indigenous peoples, and rural communities.

However, while both the Act and the Framework Strategy acknowledge the inclusion of marginalised groups, the absence of regulations under Section 23 remains a significant barrier to actualising this commitment. The forthcoming regulations, to be developed by the Minister, present a crucial opportunity to translate these broad principles into actionable policies that ensure real and meaningful participation of local communities in Uganda's carbon market.

Without such robust regulations, there is a real risk that corporate actors will dominate carbon trading, leaving local communities side-lined from the financial and environmental benefits of Uganda's climate policies. The forthcoming regulations must, therefore, go beyond mere acknowledgement of inclusivity and actively create pathways for marginalised communities to access, engage in, and benefit from carbon trading mechanisms.

***Accessibility***

Section 9 of the Act designates the Minister responsible for climate change as the authority overseeing the approval of any proponent's participation or benefits in carbon trading. Crucially, the Act empowers the Minister to publish regulations that will establish clear procedures and criteria for participation in the climate mechanism, as well as levies or fees applicable to projects. If these forthcoming regulations are crafted with inclusivity in mind, they could significantly enhance accessibility for local communities by simplifying approval processes, reducing financial barriers, and providing technical assistance for community-led projects. By ensuring that smallholder farmers, indigenous groups, and local cooperatives can navigate the regulatory framework without excessive bureaucracy or prohibitive costs, these regulations have the potential to democratise Uganda's carbon market and enable equitable participation. However, without careful safeguards, they could also risk entrenching barriers that favour well-resourced corporate players over grassroots initiatives, making the content of these regulations a critical factor in determining accessibility and fairness.

***Transparency***

The Climate Change Act mandates that the minister responsible for climate change develop regulations prescribing the nature and procedure for reporting on the performance of private entities and individuals regarding their climate obligations. These forthcoming regulations represent a critical mechanism for ensuring transparency in Uganda's carbon market. Without

clear and enforceable reporting standards, accountability frameworks, and disclosure requirements, there is a high risk of opacity, where corporations and project proponents operate without adequate scrutiny, potentially engaging in greenwashing, misrepresentation, or even fraud.

The lack of regulations regarding reporting and disclosure results in a significant transparency gap that threatens the credibility, equity, and effectiveness of Uganda's carbon market. Consequently, strong and enforceable regulations are essential and urgently needed to protect transparency, prevent exploitation, and guarantee that carbon trading benefits both the environment and those most impacted by climate change.

## 10.6 Nigeria

### Regulatory Institutions or Bodies

Nigeria increasingly recognises the potential of carbon credit markets as part of its broader climate change mitigation strategy. With its vast natural resources and diverse ecosystems, the country has opportunities for carbon credit generation through initiatives in reforestation, afforestation, and renewable energy projects. Nigeria has committed to achieving Net Zero emissions by aligning with international climate agreements, particularly the Paris Agreement. Nigeria enacted the Climate Change Act 22 of 2021. The Act provides a framework for mainstreaming climate change responses, a carbon budgeting system, and establishing the National Council on Climate Change.[336] However, Part V of the Act provides a carbon budget and national climate action. Carbon Budget means "the approved quantity of GHG emission acceptable over a specified time."[337] Section 19 empowers the minister responsible for environmental affairs to set Nigeria's carbon budget to curb the global temperature within 2°C and pursue efforts to limit the temperature increase to l.5°C above pre-industrial levels, so as to ensure compliance with international obligations.

Most importantly, the Act establishes the National Council on Climate Change (NCCC), which is mandated to make all policies and decisions on climate change matters.[338] The NCCC is empowered to collaborate with the Federal Ministry responsible for the Environment and the Federal Ministry responsible for Trade to develop and implement a mechanism for carbon emission trading.[339]

The above notwithstanding, the NCCC has published the Regulatory Guidance on Nigeria's Carbon Market Approach.[340] According to the Regulatory Guidance, NCCC has performed a preliminary analysis to create an appropriate governance framework and processes to ensure effective cooperation mechanisms.[341] The NCCC acknowledges the critical role of domestic private sector operators in enhancing the success and attractiveness of Nigeria's carbon

[336] See the Explanatory Memorandum of the Climate Change Act, 2021
[337] See the Explanatory Memorandum of the Climate Change Act, 2021
[338] S 3 of the Climate Change Act of 2022. See also Olusola Olujobi (2024) "Nigeria's Climate Change Act 2021", *Environmental Science and Pollution Research,* 36840
[339] S4(j) of the Climate Change Act of 2022.
[340] National Council on Climate Change (2024) Regulatory Guidance on Nigeria's Carbon Market Approach (Available at https://natccc.gov.ng/publications/NCCC%20Regulatory%20Guidance%20on%20Nigeria%E2%80%99s%20Carbon%20Market%20Approach.pdf.
[341] Ibid 3.

market.[342] It encourages their participation by accelerating the decarbonisation of their value chains.[343]

The Guidance Note notes the fluidity in the current structure of voluntary carbon markets and the evolving integrity initiatives around it. To this end, Nigeria's participation in the voluntary market will be based on government policies and development priorities, bringing credibility and predictability to encourage and protect participants.[344] Consequently, regulation will require a No Objection from the NCCC to authorise the issuing and transferring of certified credits generated across all sectors.[345] It is, therefore, evident that there is currently no express legislation regulating carbon credits.

In 2021, the Nigerian Federal Ministry of Environment published the 2050 Long-Term Vision for Nigeria (LTV-2050). The LTV-2050 reiterates Nigeria's intention to decarbonise. It identifies the carbon market as a way to promote decarbonisation.[346] It also acknowledges the necessity of subsidy reform, implementing a carbon tax, introducing eco-labelling, and establishing a carbon market to provide long-term policy signals.[347] However, the forgoing has yet to be implemented.

The NCCC recently conducted a preliminary analysis to develop a suitable governance framework and processes for implementing cooperation mechanisms under Article 6 of the Paris Agreement.[348]

### Sale and Purchase of Carbon Credits

The Climate Change Act of 2021 does not have express provisions concerning involvement in the voluntary carbon market. This gap in the legislation allows for a degree of self-regulation and the establishment of standards by independent organisations for carbon credit projects.[349] However, Nigerian companies and organisations develop projects aimed at reducing GHG

[342] Ibid.
[343] Ibid.
[344] Ibid.
[345] National Council on Climate Change (2024) Regulatory Guidance on Nigeria's Carbon Market Approach 3.
[346] Federal Ministry of Environment (2021), 2050 Long-Term Vision for Nigeria, 21.
[347] Ibid., 21.
[348] Templars Thought Lab (2024) The Nigerian Carbon Market: Still in Ideation 1, (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.templars-law.com/app/uploads/2024/07/The-Nigerian-Carbon-Market94.pdf) 3
[349] Sandra Osinachi-Nwandem "Unveiling Nigeria's carbon market: Policies, progress and prospects" (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://topeadebayolp.com/wp-content/uploads/2024/03/UNVEILING-NIGERIAS-CARBON-MARKET-POLICIES-PROGRESS-AND-PROSPECTS-NEWSLETTER-FEB-2024.pdf).

emissions, such as solar power plants or sustainable agriculture initiatives. The projects are verified by independent auditors and registered with the UNFCCC or other recognised carbon credit registries.[350] Carbon credits are issued to the project proponents or developers, based on the verified emissions reductions. They are traded on international markets.[351]

Nigeria has also established the Carbon Registry (NgCR). The NgCR is a platform where carbon credits are registered and carbon emissions are tracked. It further facilitates carbon credit trading and aims to empower businesses, communities and individuals to track, trade, and reduce carbon emissions in order to contribute to global climate solutions.[352] The challenge with the Carbon Registry (NgCR) is that it is a digital platform that lacks user-friendliness and has inadequate functionality information. [see figure 10.6]

### Dispute Resolution Mechanisms

The legislation is silent on the dispute resolution mechanisms in carbon trading.

### The "Just" Element

#### *Equity*

The legislation does not promote equity in relation to the local communities. This can be exemplified by the approval process for Shell Canada's participation in REDD+ projects, with claims that the decision was made solely by Nigerian authorities without obtaining the consent or approval of the indigenous communities that owned the affected lands and forests. By not allowing these communities to consent, take part, or equitably benefit from these initiatives, such practices perpetuate historical patterns of marginalisation and economic disenfranchisement. This is fundamentally an issue of equity, highlighting the power imbalance between large corporations or government authorities and indigenous or rural populations.

#### *Inclusivity*

The Act does not contain provisions concerning participation in the voluntary carbon market, which leaves room for self-regulation and standards developed by independent organisations. The NCCC is expected to issue regulations that govern participation in the Nigerian carbon

[350] Ibid
[351] Ibid.
[352] Nigeria Carbon Registry "Pioneering for a greener future" (Available at https://nigeriacarbonregistry.com/)

market and set out its central parameters. The absence of comprehensive governance frameworks and operational procedures among participants in the carbon market poses the risk of fostering exploitative market practices. This could be exemplified by the exclusion of local communities in Shell Canada for the REDD+ project. Reports indicate that Nigerian authorities made the decision to approve the project without seeking consent from the indigenous communities who own the affected lands and forests.[353] As a result, this prompted localised protests and demonstrations.[354]

***Accessibility***

The Act and NCCC lack measures to guarantee accessibility to the carbon market, allowing local communities to be excluded. Cases such as Shell Canada's involvement in the previously mentioned REDD+ project demonstrate how local communities are excluded from participating in carbon trading. These practices reinforce historical patterns of marginalisation and economic disenfranchisement by denying these communities the opportunity to consent, participate, or benefit equitably from such initiatives.

***Transparency***

The NgCR is responsible for facilitating Digital Monitoring, Recording, and verification (D-MRV), which assists with transparency and scalability, from project onboarding to credit issuance to retirement.[355] However, as alluded to above, there are challenges associated with Carbon Registry (NgCR). First, it is a digital platform.

The Nigeria Carbon Registry (NgCR) faces challenges that raise concerns about transparency in carbon market governance. Operating as a digital platform, the NgCR effectively excludes communities without internet access, electronic devices, or digital literacy from engaging with or monitoring carbon credit activities. This digital divide creates an information asymmetry, where only a privileged few, including corporate entities, government agencies, and well-

[353] Damilola S. Olawuyi, 'Fostering Accountability in Large-Scale Environmental Projects: Lessons from CDM and REDD+ Projects' (2015) 6 World Bank Legal Rev 137.
[354] Another project that posed similar challenges is the Kwale CDM Project in Nigeria. For a detailed discussion on the Kwale CDM project, see Damilola S. Olawuyi, 'Fostering Accountability in Large-Scale Environmental Projects: Lessons from CDM and REDD+ Projects' (2015) 6 World Bank Legal Rev 134-6.
[355] Nigeria Carbon Registry "Pioneering for a greener future" (Available at https://nigeriacarbonregistry.com/). For a detailed discussion on D-MRV, see World Bank. 2022. Digital Monitoring, Reporting, and Verification Systems and Their Application in Future Carbon Markets (Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://documents1.worldbank.org/curated/en/099605006272210909/pdf/IDU0ca02ce8009a2404bb70bb6d0233b54ffad5e.pdf).

resourced stakeholders, can navigate the system, leaving vulnerable communities unaware of projects that directly affect their land and resources.

Moreover, the platform's lack of user-friendliness and insufficient information exacerbate the issue. Transparency necessitates that relevant details, such as project approvals, carbon credit allocations, and benefit-sharing mechanisms, are easily accessible and comprehensible to all stakeholders. Without clear and publicly available information, the risk of mismanagement, elite capture, and exploitation of local communities increases. The lack of an inclusive, transparent mechanism undermines trust in the registry and raises concerns about whether carbon credit projects truly serve the interests of affected communities or instead benefit powerful entities at their expense.

## Conclusion

The above discussion highlights the voluntary carbon market operates mostly without regulation, leaving participants to set their own standards and guidelines for involvement. While this may be lauded for creating flexibility, it raises serious concerns. Issues such as human rights violations (including forced displacements), inequities, lack of transparency, and the exclusion of marginalised groups and local communities persist. While the NCCC is the regulatory authority, it must still improve and coalesce a regulatory framework. As the market expands, governance becomes crucial, requiring the NCCC to issue regulations on obtaining the No Objection and other rules that define participation in the carbon market.

## 10.7 Rwanda

### Regulatory Institutions or Bodies

Rwanda published the Rwanda National Carbon Market Framework in 2023. The framework outlines Rwanda's policy considerations for its engagement in carbon markets and non-market approaches under Article 6 of the Paris Agreement.[356] The Framework further provides guidelines for carbon credit trading, encouraging businesses and industries to adopt cleaner practices and sustainable technologies. It aims to enhance Rwanda's participation in international cooperation under the Paris Agreement, utilising opportunities outlined in Article 6. The CDM and the VCM are the two primary operational mechanisms under the framework.

Rwanda's commitment to reducing greenhouse gas emissions is outlined in its updated Nationally Determined Contribution (NDC), which aims for a 38% reduction by 2030 through a combination of unconditional and conditional measures across various sectors, including agriculture, energy, and waste management. The NDC targets a reduction of 4.6 million tons of $CO_2$ equivalent (tCO2e) against projected emissions of 12.1 million $tCO_2e$ in 2030, with a financial mobilisation goal of USD 11 billion to support mitigation and adaptation efforts. Approximately USD 4.1 billion is expected to come from domestic sources, while the remaining USD 6.9 billion will be sought from the international community. To achieve its conditional targets, Rwanda intends to leverage international climate finance mechanisms, including the cooperative approaches outlined in Article 6 of the Paris Agreement, building on past experiences from the CDM.

Rwanda's carbon market portfolio reflects its proactive engagement with international carbon markets. As of August 2022, the country had issued over 1.6 million carbon credits through the CDM, primarily from projects focused on energy-efficient cookstoves and renewable energy solutions. The Gold Standard is currently Rwanda's only active voluntary carbon standard, with a significant portion of carbon credits derived from improved cookstove initiatives. Additionally, Rwanda is exploring the potential for transitioning its CDM projects to align with Article 6 of the Paris Agreement, which could enhance its carbon credit issuance capacity. The government's recent NDC update signals strong interest in participating in international carbon market mechanisms, further supported by initiatives from various development partners, including the World Bank and the Global Green Growth Institute.[357]

[356] Rwanda National Carbon Framework 2023, 20.
[357] Climate Finance Innovators. (2023). *Carbon report: Rwanda 2023*. Climate Finance Innovators. Retrieved November 9, 2024, from https://climatefinanceinnovators.com/wp-content/uploads/2023/06/Carbon-Report_-Rwanda_2023_Rev03_single.pdf

The overall policy framework of Rwanda for participation in carbon markets is guided by the Paris Agreement, especially through its articles 6.2 and 6.4 on Voluntary Cooperation among Parties to Achieve Higher Mitigation and Adaptation Efforts. It states that activities under carbon markets should be undertaken with respect for environmental integrity and transparency, and double counting should be avoided. NDC consequently sets a strategic objective of tapping into climate finance and international market mechanisms, including international cooperative approaches, towards fulfilling the conditional contribution. Participation in these mechanisms will be at complete government discretion; carbon market activities would be approved in a formal approval process as activities that do contribute to reducing emissions, support sustainable development, and foster emission reductions at the global level.

The Framework establishes regulations for carbon credit trading, motivating companies and industries to embrace cleaner practices and invest in sustainable technologies. Its objective is to enhance transparency and build trust among carbon traders.[358] In Rwanda, the carbon trading system sets a national limit on total GHG emissions, thereby controlling the allowable emissions within specific areas. Industries receive designated emission allowances indicating the maximum amount of GHGs they can emit. Organisations that produce emissions under their limits can trade or sell their surplus allowances to those that exceed their quotas.[359] This market-driven approach encourages businesses to invest in cleaner technologies and adopt strategies to reduce emissions, ultimately aiding in climate mitigation efforts.[360]

The Framework further establishes the Standardised Crediting Framework.[361] This is a "streamlined, country-owned emissions reduction crediting framework that i) improves the transparency of national crediting decision-making; ii) reduces transaction cost; iii) shortens the time it takes to generate emissions reductions; iv) paves the way for transactions under Article 6 of the Paris Agreement."[362]

Regarding the institutional arrangements, Rwanda Environment Management Authority has been appointed the CDM's Designated National Authority (DNA).[363] Therefore, the Rwanda

[358] Ministry of Environment "Rwanda launches carbon market framework to advance climate action for a sustainable future" (Available at https://www.environment.gov.rw/news-detail/rwanda-launches-carbon-market-framework-to-advance-climate-action-for-a-sustainable-future#:~:text=Rwanda%20has%20today%20launched%20its,and%20carbon%20neutral%20by%202050.)
[359] Ibid.
[360] Ibid.
[361] Rwanda National Carbon Framework 2023, 12.
[362] Ibid.
[363] Rwanda National Carbon Framework 2023, 20.

Environment Management Authority approves the proposed CDM projects. The DNA primarily assesses carbon market projects to ensure they contribute to the host country's sustainable development goals, maintain environmental integrity, and achieve emission reductions.

### Sale and Purchase of Carbon Credits

In Rwanda, carbon credit trading is facilitated by a structured system that ensures transparency and efficiency.[364] The National Carbon Market Framework, introduced in December 2023, establishes a cap-and-trade approach. It allows businesses to receive emission allowances and trade surplus credits for those exceeding their limits.

### Dispute Resolution Mechanisms

As mentioned earlier, the Rwanda Environment Management Authority regulates the carbon market and is crucial in resolving disputes. Though the available sources do not provide specific details about the dispute resolution process, the Rwanda Environment Management Authority's involvement indicates a systematic method for handling and resolving conflicts within the carbon trading system.

### The "Just" Element

#### *Equity*

The Framework is silent on how benefits from carbon trading are shared, particularly in the context of local communities. The absence of a clear framework for sharing benefits in carbon trading impairs equity and justice for local communities. In the absence of such provisions, local communities, especially those living in carbon-rich regions like forests, may find themselves shut out from the economic opportunities created by carbon trading initiatives. This results in a skewed advantage for external investors and corporations while neglecting to reward the communities for their contributions to sustaining these vital ecosystems. The absence of a benefit-sharing framework continues historical patterns of land dispossession and economic marginalisation, as communities are frequently displaced or left out of decision-making processes about land use and natural resources management.

[364] Ministry of Environment "Rwanda launches carbon market framework to advance climate action for a sustainable future" (Available at https://www.environment.gov.rw/news-detail/rwanda-launches-carbon-market-framework-to-advance-climate-action-for-a-sustainable-future#:~:text=Rwanda%20has%20today%20launched%20its,and%20carbon%20neutral%20by%202050.)

### *Inclusivity*

According to the Department of Environment, Rwanda will provide high-quality carbon credits that will not only deliver climate benefits but also empower communities and safeguard as well as restore biodiversity. However, the Framework discussed above does not set out in clear terms how this will be achieved. This in turn raises a concern of exclusion of the marginalised and local communities.

### *Accessibility*

The Framework is also silent on issues of accessibility of carbon projects or carbon by the local communities. This again raises concern about exclusion, transparency and the threat of human rights violations.

### *Transparency*

According to the Ministry of Environment, in order to participate in this market, there are strict validation and certification processes that proposed carbon projects must comply with to ensure that they meet internationally recognised standards.[365] This provides the credibility and environmental integrity of the carbon credits available for trading in the market.

Rwanda has also signed a deal with GenZero, the Rwanda Green Fund, and carbon certification body Gold Standard, which pledges to ensure project integrity.[366] This promises to enhance the credibility of carbon trading in Rwanda.

## Conclusion

Rwanda's carbon trading system represents a significant step towards climate action; however, the absence of clear legislation regarding benefit-sharing with local communities is a concern. This gap raises questions about equity and accessibility, as local communities may be excluded from the economic benefits despite their role in carbon sequestration. Although the verification process adds credibility to the system and ensures the integrity of carbon credits, the lack of provisions for community involvement and profit-sharing could lead to unfair outcomes.

[365] Ministry of Environment "Rwanda launches carbon market framework to advance climate action for a sustainable future" (Available at https://www.environment.gov.rw/news-detail/rwanda-launches-carbon-market-framework-to-advance-climate-action-for-a-sustainable-future#:~:text=Rwanda%20has%20today%20launched%20its,and%20carbon%20neutral%20by%202050.)

[366] David Stanway "Singapore's GenZero to work with Rwanda on carbon offset projects" (Available at https://www.reuters.com/business/environment/singapores-genzero-work-with-rwanda-carbon-offset-projects-2024-09-19/?utm)

Strengthening the framework to guarantee that local communities benefit directly is essential for promoting genuine inclusivity and fairness.

## 10.8 South Africa

### Regulatory Institutions or Bodies

In 2024, South Africa promulgated the Climate Change Act 22 of 2024, along with the Integrated Resource Plan 2023 (IRP), which supports the development of carbon markets. Although the Act has yet to be enforced, it aims to establish a legal framework for managing and implementing the country's responses to climate change, including carbon pricing mechanisms. However, the Act does not expressly provide for carbon markets and carbon credits. The carbon market and carbon credit are provided for in the Carbon Tax 15 of 2019. The Carbon Tax Act 15 of 2019 is described as a fiscal measure to reduce GHG emissions in South Africa by levying a carbon tax on GHG emissions.[367] The Act aims to introduce carbon tax entities based on their GHG emissions and promote the reduction of carbon emissions across various sectors.[368]

Similar to the Climate Change Act, the Act does not expressly define a carbon market or carbon credit. The Carbon Tax Act permits companies to use carbon offsets, allowing them to reduce their carbon tax liability by up to 5 to 10 per cent of their actual emissions. Section 4 states that a carbon tax must be applied to the total GHG emissions of a taxpayer during a given tax period, measured as the carbon dioxide equivalent of those emissions. Section 13 provides an offset allowance and states that a taxpayer may reduce the amount of the carbon tax for which the taxpayer is liable in respect of a tax period by utilising carbon offsets as prescribed by the Minister. The commissioner for the South African Revenue Service is identified as responsible for administering the provisions of the Carbon Tax Act 15 of 2009.

In 2019, the South African government published the Carbon Offset Regulations.[369] These regulations provide for an offset mechanism that may be used to develop carbon offset projects and reduce carbon tax liability.[370] The regulations allow offsets from the CDM, VCS, Gold Standard, and approved domestic standards.[371] Offsets must be generated in South Africa, meet eligibility criteria, and cannot involve activities already subject to the carbon tax. Certain activities are also listed as ineligible for offsets under this allowance.[372]

[367] Bowmans (2023) Recent developments in African carbon Markets 3.
[368] Section 2 of the Carbon Tax 15 of 2009.
[369] See GG42873 in GN 1556 of 29 November 2019.
[370] Preamble of the Carbon Offset Regulations GG42873 in GN 1556 of 29 November 2019.
[371] See regulation 3 of GG42873 in GN 1556 of 29 November 2019.
[372] See regulation 4 of the GG42873 in GN 1556 of 29 November 2019.

In 2020, the government launched the Carbon Offset Administration System, which enables the listing, transfer, and retirement of carbon credits to offset carbon tax liabilities.[373] The Carbon Tax Offset system starts with the approval of a specific project by the relevant project standard. Standards allowed in the South African offset scheme include the CDM, VCS, and Gold Standard (GS).

Based on the foregoing discussion, South Africa is the only nation in Africa with an extant compliance market.[374]

### Sale and Purchase of Carbon Credits

The Johannesburg Stock Exchange (JSE) launched a new carbon market in partnership with Xpansiv, a prominent infrastructure provider for global environmental markets, through its subsidiary, JSE Ventures, in 2023.[375] The trading platform allows local participants to buy or sell carbon credits and renewable energy certificates (RECs) held in local or global registries.[376] It adds another tool to mitigate climate change. This market allows local participants to trade carbon credits and renewable energy certificates from local and international registries RECs relate to renewable energy usage and can reduce scope 2 emissions from purchased electricity. The platform is seen as a tool for mitigating climate change and meeting corporate environmental, social, and governance (ESG) targets. Concerns have emerged about the VCM, including the credibility of the carbon credits, the risk of greenwashing, and whether the credits accurately reflect emissions reductions. Legal experts highlight the current imbalance of demand and supply for credits in Africa, citing regulatory and land tenure uncertainties and financial barriers to smaller projects. Despite these challenges, South Africa is well-positioned for carbon projects, though developers face regulatory and financial hurdles in securing land rights and raising the necessary funds for project development and management.[377]

### Dispute Resolution Mechanisms

There is no specified dispute resolution mechanism in South Africa. However, Chapter 4 of the National Environmental Management Act, 107 of 1998 (NEMA) allows for the use of

[373] Government of South Africa (2020) Carbon Offset Administration System (Available at https://carbon.energy.gov.za/Home.aspx)
[374] Africa Carbon Markets Initiative (2024) Introduction to Carbon Markets in Africa (Available at https://africacarbonmarkets.org/carbon-markets-africa/#:~:text=South%20Korea%20and%20Singapore%20are,to%20have%20a%20compliance%20market.)
[375] ENSAfrica (2023) The launch of the Voluntary Carbon Market in South Africa (Available at https://www.ensafrica.com/news/detail/7808/the-launch-of-the-voluntary-carbon-market-in-)
[376] ENSAfrica (2023) The launch of the Voluntary Carbon Market in South Africa (Available at https://www.ensafrica.com/news/detail/7808/the-launch-of-the-voluntary-carbon-market-in-)
[377] (BusinessTech, 2024).

alternative dispute resolution methods to promote fair decision-making and effectively manage conflicts on matters that relate to the environment.[378]

## The "Just" Element

### *Equity*

In South Africa, carbon trading involves large corporations purchasing carbon credits from local initiatives. This practice may disproportionately favour wealthier urban populations, often at the expense of rural and marginalised communities and small businesses. The concept of equity is compromised when less affluent communities suffer from environmental damage or economic setbacks, while richer entities gain profits from carbon offset programmes. For example, communities situated near industrial areas may endure environmental degradation due to carbon-heavy operations, yet the carbon credits produced from these activities do not benefit them, but instead benefit corporations. Consequently, these communities may experience a violation of their right to a clean and healthy environment, as guaranteed in section 24 of the Constitution of South Africa.

### *Inclusivity*

Although the Carbon Tax and the regulations do not expressly facilitate the inclusivity of local communities, the assumption can be deduced from other South African legislation in the form of public participation. In South Africa, a list of identified projects (activities) must be carried out subject to government authorisation.[379] To obtain authorisation, the project proponent must conduct the Environmental Impact Assessment (EIA) process, as per the National Environmental Management Act 107 of 1998 (NEMA). At the heart of EIA is public participation. The 2014 EIA Regulations have extensive provisions regarding the public participation of local communities in projects where such projects are identified.[380] NEMA requires that all large-scale environmental projects, including carbon offset schemes, undergo a rigorous public consultation process with affected communities and stakeholders.

When communities hold customary land rights in areas designated for proposed projects, the law mandates the inclusion of the principle of free, prior, and informed consent, especially for

[378] DFFE "Environmental sector conflict and dispute resolution" (Available at https://www.dffe.gov.za/environment-sector-conflict-and-dispute-resolution?utm_source)
[379] See section 24 of National Environmental Management Act 107 of 1998, read with its 2014 Environmental Impact Assessment Regulations.
[380] GN R989 in GG38282 of 4 December 2014.

projects impacting indigenous communities and those reliant on local natural resources. This was confirmed in the Baleni and Others v Minister of Mineral Resources and Others and Casac and Others v the Ingonyama Trust and Others judgement.[381] This is important in carbon offset projects like forest conservation or large renewable energy developments that may affect indigenous lands or traditional livelihoods.

For example, the Kruger National Park is involved in carbon credit projects, and the participation of local communities, such as those living in adjacent areas, is essential to the success of these initiatives. However, there have been challenges related to meaningful inclusion and sharing of carbon credit revenues with these communities.

***Accessibility***

Accessibility is a concern, due to the high capital investment and technical knowledge required for participation in the carbon market. In order to ensure broader accessibility, the South African government has focused on enabling participation from small and medium enterprises (SMEs), local communities, and rural areas through mechanisms like the Clean Development Mechanism (CDM) and the Voluntary Carbon Market. For instance, the South African Carbon Offset Administration System (COAS) has been established to assist local projects in facilitating the listing, transfer, and retirement of carbon.[382] The primary risk is the lack of technical support and financial resources, which limits accessibility for marginalised communities. This could exacerbate inequity by keeping disadvantaged groups out of the carbon trading process.

***Transparency***

The Climate Change Act emphasises reporting and verification mechanisms to ensure that carbon credits generated from offset projects meet international standards and that the benefits are distributed equitably. As alluded to above, the government has established a Carbon Registry to track and verify carbon credits. This registry enhances transparency by ensuring that all credits undergo independent verification. Additionally, it mandates regular updates from carbon offset projects to monitor progress and impact. This should be assessed against

[381] See Baleni and Others v Minister of Mineral Resources and Others 2019 (2) SA 453 (GP) (22 November 2018) available at https://www.saflii.org/za/cases/ZAGPPHC/2018/829.htm and Council for the Advancement of the South African Constitution and Others v Ingonyama Trust and Others 2022 (1) SA 251 (KZP) (11 June 2021) available at
https://www.saflii.org/za/cases/ZAKZPHC/2021/42.html
[382] See https://carbon.energy.gov.za/Home.aspx

existing mechanisms for transparent monitoring and accountability, including independent oversight and grievance redress systems. For these mechanisms to be effective, they must be accessible to communities, ensure grievances are resolved through an independent and impartial process, and provide clear remedies.

It is unclear as to whether such mechanisms currently exist or function properly, raising concerns about transparency. This question necessitates further exploration.

Additionally, legislation such as Promotion of Access to Information 2 of 2000 allows the public to request access to information from both the government and private entities. The provision of this Act may be used to request information on the progress and outcomes of carbon projects, where they believe such projects may affect their rights. This may include ensuring that affected communities are kept suitably informed about the benefits and potential risks of local carbon projects in their areas.

## Conclusion

South Africa's carbon trading framework incorporates various legal and institutional mechanisms aimed at embedding principles like equity, inclusivity, accessibility, and transparency. Although significant progress has been made, challenges remain in fully realising these principles, particularly for vulnerable communities. Continued efforts to enhance governance, encourage public participation, and ensure equitable benefit-sharing are crucial to mitigating potential human rights violations and achieving a fair and just carbon trading system in South Africa.

# 11. Comparative Analysis of Regulatory Approaches

## 11.1 Land Rights: Comparative analysis of land rights protections in African carbon market regulations

The regulatory frameworks reveal both shared gaps and distinct approaches concerning land rights protections for Indigenous and local communities. Tanzania's framework, despite regulating carbon trading,[383] lacks explicit mechanisms to prevent restricted access to forested lands crucial for livelihoods.[384] This challenge is similar to Zimbabwe's framework, where the absence of clear tenure protections could expose rural communities to potentially losing land.[385] Unlike Tanzania and Zimbabwe, Zambia takes a step towards community inclusion by encouraging participation in forest carbon projects, yet it falls short of explicitly indicating protections for local land and resource rights.[386] Though Zambia promotes sustainable forest management, it does not formally integrate indigenous land practices; an omission that weakens its ability to protect the rights of indigenous peoples.[387]

Kenya, while offering stronger participation mechanisms compared to the other three, does not fully shield communities from land dispossession either.[388] Its unique approach of differentiating between land-based and non-land-based carbon projects expands the scope for the involvement of local communities, making it more flexible than Tanzania's and Zimbabwe's rigid land-use focus.[389] However, like Zambia, Kenya lacks explicit provisions preventing the potential loss of land for local communities and indigenous peoples, due to carbon projects. Notably, there is a unifying gap across all jurisdictions, in the failure to fully and explicitly integrate traditional and indigenous knowledge systems into these regulations.

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[383] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 19 – 20 read together with Environmental Management (Control and Management of Carbon Trading) (Amendment) (2023), at 12. https://velmalaw.co.tz/news/control-and-management-of-tanzanian-carbon-trading-regulations-2022/

[384] Regulation 2022, 22-23. Amendment 2023, 3.

[385] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1016.

[386] Forest (Carbon Stock Management) Regulations SI No. 66 of 2022, 600-605. See also the Supplementary Interim Guidelines from the Ministry of Green Economy and Environment (2023)(the Guidelines) (available at https://www.moiramukuka.com/wp-content/uploads/2022/12/INTERIM-GUIDELINES-FOR-CARBON-MARKETS-AND-TRADING-ARTICLE-MOIRA-MUKUKA.pdf )

[387] Ibid.

[388] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 2024, 1191.

[389] Ibid., at 1198 &1199.

### 11.2 Public Participation: Comparative analysis of public participation in carbon market regulations across Africa

South Africa leads in incorporating public participation in carbon markets through its environmental impact assessment (EIA) process under the National Environmental Management Act (NEMA), ensuring that communities, particularly those with customary land rights, are consulted before projects proceed.[390] However, while the principle of free, prior, and informed consent is acknowledged, challenges persist in meaningful inclusion and revenue-sharing, as seen in projects near Kruger National Park.[391] In contrast, Nigeria lacks clear regulations on public participation in its voluntary carbon market, leaving governance to independent standards, which creates the risk of exploitative practices.[392]

Uganda's Climate Change Act acknowledges indigenous and marginalised communities, but the absence of regulations under section 23 weakens the enforcement of inclusivity, allowing corporate dominance in carbon trading.[393] Kenya takes a technical approach, involving multi-sectoral expertise in carbon project assessments, yet it lacks explicit mechanisms to ensure indigenous community representation in decision-making. [394]

Zimbabwe, though mandating local consultations, does not specify the depth of community engagement, which can then lead to project developers and authorities dominating oversight, rather than indigenous and small-scale farmer representation.[395] While most of these countries recognise stakeholder involvement to some extent, South Africa's legal framework provides the most structured approach, whereas Uganda and Kenya present the potential for improvement through forthcoming regulations. Nigeria and Zimbabwe, however, clearly require stronger provisions in order to move beyond surface-level consultations towards genuine participatory decision-making in carbon markets.

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[390] See section 24 of National Environmental Management Act 107 of 1998, read with its 2014 Environmental Impact Assessment Regulations.
[391] See Siyabonga Africa "Saving the Planet and Money" (Available at https://www.krugerpark.co.za/krugerpark-times-e-4-saving-the-planet-25115.html)
[391] https://carbon.energy.gov.za/Home.aspx
[392] Explanatory Memorandum of the Climate Change Act, 2021. See also National Council on Climate Change (2024) Regulatory Guidance on Nigeria's Carbon Market Approach (Available at https://natccc.gov.ng/publications/NCCC%20Regulatory%20Guidance%20on%20Nigeria%E2%80%99s%20Carbon%20Market%20Approach.pdf)
[393] National Climate Change (Climate Change Mechanisms) Regulations of 2024. See also Section 23 of the Climate Change Act 22 of 2021.
[394] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 2024, 1192.
[395] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1027.

### 11.3 Right to Access Justice: Comparative analysis of dispute resolution mechanisms in carbon market regulations across Africa should potential injustices arise

Dispute resolution mechanisms in carbon market regulations across African jurisdictions vary significantly, with some countries establishing formal processes, while others remaining silent on the issue. Kenya provides one of the more structured approaches, integrating dispute resolution within its Climate Change Act through section 23H and incorporating a grievance resolution subcommittee under community development agreements for projects on public or community land.[396] This ensures that affected communities have a direct forum in which to address their grievances. In contrast, Zambia mandates that each carbon project includes a grievance redress mechanism within its project design, allowing disputes over benefit-sharing and environmental impacts to be addressed at the project level.[397] Additionally, Zambia's director of forestry plays a key role in mediating disputes related to permits and transactions, offering administrative oversight that is absent in many other jurisdictions.[398]

Zimbabwe also incorporates a clear appeals process, allowing aggrieved parties to challenge decisions before the minister, with the possibility of further review by the administrative court, providing a secondary layer of legal oversight.[399] Uganda, on the other hand, takes a judicial approach, allowing individuals to approach the high court if their rights are threatened by actions related to climate change adaptation or mitigation, therein offering legal recourse at a higher level.[400] While this provides a robust avenue for dispute resolution, it may be less accessible for local communities due to the complexities and costs of litigation. In contrast, Tanzania and Nigeria lack explicit dispute resolution frameworks within their carbon market regulations, creating a legal gap that could leave communities vulnerable to arbitrary detentions and unjust imprisonments linked to carbon credit projects. Ultimately, while some States, like Kenya and Zimbabwe, offer structured dispute resolution mechanisms with administrative and legal recourse, others, such as Nigeria and Tanzania, leave serious gaps that may expose local Indigenous communities to potential injustices without clear pathways should they require access to justice.

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[396] The Climate Change Act CAP. 387A (2023), 23.
[397] Forest (Carbon Stock Management) Regulations SI No. 66 of 2022, 612. See also the Supplementary Interim Guidelines from the Ministry of Green Economy and Environment (2023)(the Guidelines) (available at https://www.moiramukuka.com/wp-content/uploads/2022/12/INTERIM-GUIDELINES-FOR-CARBON-MARKETS-AND-TRADING-ARTICLE-MOIRA-MUKUKA.pdf )
[398] Ibid.
[399] Carbon Credits Trading (General) Regulations (CAP. 20:27) 2023, 1016.
[400] Uganda's National Climate Change (Climate Change Mechanisms) Regulations of 2024. Climate Change Act 22 of 2021

### 11. 4 Women's Rights: Comparative analysis of carbon market regulations and women's access in Africa

Across African jurisdictions, carbon market regulations present significant barriers to women's participation, particularly at the community level. Zambia provides a structured approach to project registration and carbon stock trading, but its administrative complexities and financial costs disproportionately disadvantage women-led community projects.[401] Without targeted support, such as reduced fees and technical assistance, women, especially those in grassroots initiatives, remain excluded from benefiting fully from carbon markets. Similarly, Kenya's requirement for project proponents to be legal entities with financial and technical expertise creates a structural disadvantage for women, who often lack access to the financial capital and specialised knowledge needed to navigate the system.[402] Without clear provisions that lower these barriers, such as capacity-building initiatives or preferential support for community-led projects, women's participation will remain limited.

Tanzania's registration fees, calculated as 1% of a project's expected gross annual revenue, further restrict entry, particularly for small, women-led projects that may not have the financial means to comply.[403] The bureaucratic complexity of the registration process exacerbates these challenges, making it difficult for marginalised groups, including women, to gain a foothold in the sector. In Zimbabwe, similarly, high compliance costs and intricate regulatory procedures deter small community-led projects, effectively excluding women, who are often at the forefront of environmental stewardship at grassroots level.[404] Simplified administrative procedures and financial support mechanisms could enhance their access and participation in the carbon market. The absence of explicit protections for women in carbon market regulations leaves them vulnerable. That is, not only vulnerable to economic exclusion but also to potential exploitation and gender-based violence, particularly in male-dominated negotiation spaces. Without provisions addressing these risks, women in affected communities may experience unfair treatment, loss of land rights, or even exposure to coercion and abuse tied to carbon credit projects. Addressing these gender disparities requires regulatory reforms that actively

[401] Carbon Stock Management (2022), 598.
[402] The Climate Change (Carbon Markets) Regulations, (Cap. 387A) 2024, 1198 &1199.
[403] The Environmental Management (Control and Management of Carbon Trading) Regulations, (Cap. 191) 2022, 11 read together with Environmental Management (Control and Management of Carbon Trading) (Amendment) (2023). (Available at https://velmalaw.co.tz/news/control-and-management-of-tanzanian-carbon-trading-regulations-2022/. See also https://velmalaw.co.tz/news/control-and-management-of-tanzanian-carbon-trading-regulations-2022/ )
[404] General Regulation 2023, 1027.

promote equitable access, integrate gender-sensitive policies, and establish rights against discrimination and exploitation in carbon markets across Africa.

### 11.5 Concluding remarks

The regulatory frameworks governing carbon credits vary significantly across the selected countries, reflecting different national priorities and approaches to climate action. In Rwanda, the government has established a comprehensive legal framework to support carbon credit projects, including policies that facilitate participation in international carbon markets. The National Climate Change Policy outlines strategies for emissions reduction and sets the stage for effective implementation of carbon offset initiatives. In the DRC, while there is an emerging interest in carbon markets, the regulatory environment remains less developed, with a need for clearer guidelines to promote investment in sustainable projects.

In Southern Africa, South Africa has one of the most advanced regulatory frameworks for carbon credits, integrating emissions trading into its broader climate strategy. The government has established mechanisms such as the Carbon Tax Act, which incentivizes businesses to reduce emissions and engage in carbon credit generation. Namibia, on the other hand, has developed policies that support renewable energy projects but requires further strengthening of its regulatory structures to enhance carbon market participation. Both countries face challenges related to enforcement and monitoring, which are critical for the integrity of carbon credit systems.

In East and West Africa, Kenya and Uganda have implemented regulatory frameworks that encourage carbon credit projects through national climate action plans. Kenya's approach includes provisions for the registration and verification of carbon offset projects, while Uganda's policies promote community involvement in carbon markets. Nigeria and Senegal, however, face challenges related to the consistency and clarity of their regulatory environments, which can impede investment in carbon credits. Overall, while progress has been made in establishing regulatory frameworks, there remains a need for harmonisation and alignment of policies to facilitate effective carbon market participation across the region.

Despite the progress made in establishing regulatory frameworks for carbon credits, several key gaps persist within these structures across the selected countries. One of the primary challenges is the enforceability of regulations, which can vary significantly between countries. In Rwanda and DRC, the lack of clear enforcement mechanisms can undermine the credibility of carbon credit projects, discouraging investment and participation from both local and international stakeholders. In South Africa and Namibia, while the regulatory frameworks are

more developed, challenges related to compliance monitoring and enforcement still exist, particularly for smaller companies and community-based projects.

Transparency is another critical issue affecting the effectiveness of carbon credit regulations. In countries like Kenya and Uganda, there is a need for greater clarity regarding the processes for project registration, monitoring, and verification. Stakeholders often face difficulties in accessing information about regulatory requirements, which can hinder the development of carbon credit projects. Furthermore, the lack of standardized methodologies for measuring emissions reductions can lead to discrepancies in carbon credit generation, affecting the overall integrity of the market.

Finally, accessibility remains a significant gap in the regulatory frameworks of Nigeria and Senegal, where smallholder farmers and local communities often struggle to engage with carbon credit markets. Limited access to financing, technical expertise, and information can prevent these stakeholders from participating in carbon projects that could enhance their livelihoods. Addressing these gaps requires targeted efforts to improve regulatory frameworks, enhance stakeholder engagement, promote capacity-building initiatives that empower local communities in their participation in carbon markets, and ensuring that carbon markets serve an improved future for African societies as part of a global community of concern over climate change.