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BENEFIT-SHARING IN LAND-BASED CARBON PROJECTS: THE ADEQUACY AND CERTAINTY OF ZAMBIA'S LEGAL FRAMEWORK

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A directed research report submitted to ZCAS University in partial fulfilment of the requirements for the award of the degree of Master of Laws (LLM) in taxation and Investment

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DEDICATION

I dedicate this work to my mother.

This research began, evolved and reached completion alongside a season of life that demanded everything I had. There were moments when the research felt insurmountable and the deadline impossibly close. In those moments, I did not think of shortcuts. I thought of her, of the standard she has set by the way she has lived her life, meets her responsibilities and refuses to let difficulty have the last word.

She is my model of what it means to persevere without complaint, to lead without asking for recognition, and to love without keeping score. At the time of submitting this thesis for examination, I do so with the knowledge that every quality in me that makes this possible is rooted in her.

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To my family, and to my three sisters in particular, I owe more than these words can adequately express. Your unwavering belief in me has been a constant source of strength, and your encouragement carried me through every moment of self-doubt. I am because you believed I could.

ABSTRACT

This study asks whether Zambia's legal framework secures equitable and certain benefit-sharing in land-based carbon projects. Benefit-sharing denotes the legal arrangements by which the financial and non-financial returns from carbon projects are allocated among project developers, the State, landowners and host communities. The question is timely because Zambia has placed carbon trading on a statutory footing through the Green Economy and Climate Change Act, 2024 (hereinafter 'the GECC Act') and the Green Economy and Climate Change (Carbon Market) Regulations, 2026. Whether these instruments convert benefit-sharing into enforceable entitlements, rather than leaving it to the bargaining power of the parties, is the study's central concern. The study analyses the relevant statutes, subsidiary instruments and constitutional provisions and develops six evaluative criteria, namely clarity of carbon rights, statutory specificity, enforceability, transparency and accountability, participation and constitutional alignment, drawn from the literature on distributive justice, fiduciary stewardship, property rights and political economy and from the Paris Agreement, the Reducing Emissions from Deforestation and Forest Degradation in developing countries (REDD+) safeguards and the United Nations Declaration on the Rights of Indigenous Peoples. These criteria are then applied, provision by provision, to the Zambian framework and to the comparator jurisdictions, so that the assessment rests on stated standards rather than impression. Applying these criteria, the study finds the framework procedurally elaborate but substantively under-determined. Section 22 of the Act vests carbon in the President without articulating the derivative entitlements of communities and landowners; section 21(7) makes the community development and benefit-sharing agreement conditional on an undefined 'where applicable' test and defers its content to regulation; and the Carbon Market Regulations introduce a volume-based share of proceeds and a model template but prescribe no minimum community share, no formula and no accessible enforcement pathway. The framework therefore performs poorly on clarity of carbon rights, statutory specificity and enforceability, and is open to question on constitutional alignment with Article 255 of the Constitution and the principle of legality. Comparative analysis of Kenya and Tanzania yields five reform principles: a statutory minimum community allocation (Kenya prescribes forty per cent of land-based project earnings); an upstream recognition of carbon rights; a registry-based transparency infrastructure; community-accessible enforcement pathways; and an operational free, prior and informed consent standard. The study concludes that the framework codifies the architecture of carbon trading without codifying the architecture of carbon justice and recommends targeted amendments to the Act and the Regulations to recognise carbon rights, fix a minimum community share, make benefit-sharing a precondition of authorisation, require consent and mandate public disclosure. The study is confined by the novelty of the framework and the limited Zambian case law and literature on the post-2024 architecture, but it offers a doctrinal foundation for the legislative reform that equitable and certain benefit-sharing in Zambia now requires.

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Zambia

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Green Economy and Climate Change (Carbon Market) Regulations 2026, Statutory Instrument No 5 of 2026

Lands Act, Chapter 184 of the Laws of Zambia

Mines and Minerals Development Act 2015 (Act No 11 of 2015)

Kenya

Constitution of Kenya 2010

Climate Change Act (Cap 387A), as amended by the Climate Change (Amendment) Act 2023 (Act No 9 of 2023)

Climate Change (Carbon Markets) Regulations 2024, LN 84

Community Land Act 2016 (Act No 27 of 2016)

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Environmental Management Act 2004 (Cap 191)

Environmental Management (Control and Management of Carbon Trading) Regulations 2022, GN No 636

Local Government (District Authorities) Act 1982 (Cap 287)

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International Instruments

Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 3156 UNTS

United Nations Declaration on the Rights of Indigenous Peoples (adopted 13 September 2007, UNGA Res 61/295)

UNFCCC, 'The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' (Decision 1/CP.16, 2010)

CHAPTER ONE: GENERAL INTRODUCTION

1.1 Introduction

Zambia is a country richly endowed with natural resources, holding fertile land, extensive forests, water and significant mineral wealth, and for much of its history its development has depended on converting that endowment into national income. Where a country is so endowed, the central question is whether that wealth actually reaches the country and, in particular, the people on whose land it is found. Zambia's experience suggests that the answer turns less on the abundance of the resource than on the legal rules that govern who is entitled to its benefits and how those benefits are shared.

The mineral sector illustrates the point and is used here only as an example. At the macro level, mineral extraction has long contributed significantly to gross domestic product, export earnings and government revenue, so on that measure the resource may be said to have benefited the nation[1]. Yet at the micro level the story is often different in that the communities in and around the areas from which minerals are taken have not always seen a corresponding improvement in their circumstances, and wealth recorded in national accounts has not reliably translated into benefit at the local level. A recurring reason for this disparity is not the absence of value but the absence of clear, certain and enforceable legal rules on entitlement and distribution; where the law is silent on who is entitled to what, distribution follows bargaining power rather than principle, and those with the least power receive the least.

Carbon is the newest resource that Zambia is being called upon to commercialise. The country's forests and land now generate a tradeable asset in the form of carbon credits, Carbon trading offers a genuine opportunity to finance conservation and development at the same time, but it also carries the risk of repeating the resource pattern just described, in which substantial revenues may accrue to some stakeholders and little may reach others.[2]

It is this concern that animates the study. The research analyses Zambia's legal framework for benefit-sharing in land-based carbon projects to determine whether it is adequate and certain enough to ensure that the benefits of carbon trading are genuinely and equitably shared among the State, the project developer and the host community/landowners, so that the framework

[1] Alastair Fraser and Miles Larmer (eds), Zambia, Mining, and Neoliberalism: Boom and Bust on the Globalized Copperbelt (Palgrave Macmillan 2020).
[2] United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107.

serves the purpose for which it was enacted. This chapter proceeds from this introduction to the background of the study, the statement of the problem, the objectives and research questions, the significance, the scope and limitations, the methodology, a review of the literature, the ethical considerations and an outline of the chapters that follow.

1.2 Background to the Study

Zambia matters to the global carbon economy. Its forest cover is among the most extensive in sub-Saharan Africa and holds one of the region's largest stores of land-based carbon, yet that forest estate is shrinking quickly as charcoal burning, small-scale farming and a growing population drive some of the highest rates of forest loss on the continent. The country is therefore pulled in two directions at once: it has an interest in conserving and managing its forests, and an interest in earning revenue from them through carbon markets in ways that reach local communities and advance national development. How the law reconciles those two pulls is the setting for this study.

Climate change has simultaneously emerged as one of the defining governance challenges of the twenty-first century, prompting sustained multilateral responses. The United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, laid the foundations for international cooperation on climate change[3]. The Paris Agreement, adopted under the UNFCCC in December 2015, deepened these commitments materially, committing its parties to hold the rise in global average temperature to well below 2°C, and to pursue efforts towards 1.5°C, above pre-industrial levels[4]. In fulfilment of their Paris obligations, states are required to formulate and periodically enhance Nationally Determined Contributions (NDCs) quantified national emission reduction targets and climate adaptation plans submitted to the UNFCCC.

The private sector has also become central to how carbon is governed. Under the banner of Environmental, Social and Governance (ESG) standards, large investors increasingly make their funding conditional on demonstrable environmental and social performance. For firms in high-emission industries, or those seeking international finance, taking part in carbon trading, whether on voluntary or compliance markets, has become both a business and a reputational expectation. Much of the current interest in land-based carbon projects in countries such as

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[3] Paris Agreement to the United Nations Framework Convention on Climate Change (adopted 12 December 2015, entered into force 4 November 2016) 3156 UNTS 79, art 2(1)(a).

[4] Republic of Zambia, 'Zambia's Nationally Determined Contribution 3.0' (Ministry of Green Economy and Environment, October 2025) <https://unfccc.int/sites/default/files/2025-10/NDC%203.0%20COPY%20OF%20ZAMBIA'S%20ICTU%20FOR%20SUBMISSION%20.pdf> accessed 25 June 2026.

Zambia is driven not only by domestic law but by these ESG expectations placed on the developers and financiers who design and fund the projects.

Zambia is no exception to these global dynamics. As a signatory to both the UNFCCC and the Paris Agreement, Zambia submitted its third Nationally Determined Contribution (NDC 3.0) in October 2025, committing unconditionally to reduce its greenhouse gas emissions by 25 per cent against a 2010 baseline by 2030, and by 47 per cent conditional on adequate international support[5]. To domesticate these international commitments, Zambia enacted the Green Economy and Climate Change Act, 2024, which constitutes the primary legislative framework for carbon market governance at the national level. Zambia has further engaged international partners bilaterally under Article 6 of the Paris Agreement: at the Twenty-Ninth Conference of Parties (COP29) held in Baku, Azerbaijan, in November 2024, the Government of Zambia signed bilateral cooperation agreements with the Kingdom of Norway and the Kingdom of Sweden respectively, establishing formal frameworks for cross-border carbon credit transactions and climate-related green investment. These agreements position Zambia as an active participant in international carbon markets and underscore the commercial and diplomatic significance of its regulatory choices[6].

Money is the further layer that makes the question urgent. Land-based carbon projects, drawing their value from forests, conservation areas and farmland, can generate sizeable revenues for those involved, and for private actors a carbon credit is at once a compliance tool and a saleable asset. The communities and landowners whose land hosts these projects, however, do not share in those revenues as of right. How the returns are divided between developers, the State, landowners and host communities, and what legal rules govern that division, is the governance problem at the heart of this study.

Benefit-sharing in the context of land-based carbon projects refers to the legal and institutional arrangements by which the economic and non-economic returns from greenhouse-gas mitigation activities are allocated among stakeholders, notably project developers, the State, landowners and local communities[7]. Benefit-sharing presumes an underlying legal claim or

[5] Ministry of Green Economy and Environment (Republic of Zambia), 'Zambia Signs Bilateral Agreements with Norway and Sweden at COP29' (SPAR6C, 18–19 November 2024) <www.spar6c.org/news/zambias-climate-commitment-yields-results-bilateral-agreements-signed-sweden-and-norway-cop29> accessed 25 June 2026.
[6] Benefit Sharing Mechanisms a Core Component of Carbon Project Development, Available at : https://www.viagroforestry.org/app/uploads/2025/01/benefit-sharing-mechanisms.pdf Accessed December 06 2025
[7] Charlotte Streck and Jolene Lin, 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) 19 *European Journal of International Law* 409. 7u

entitlement to the carbon asset or to revenues derived from it; absent such claims, distribution becomes a function of bargaining power and administrative discretion rather than law.[8] The literature demonstrates that clear statutory rules on entitlement, allocation and enforcement are central both to distributive justice and to the credibility of carbon markets: well-defined benefit-sharing reduces social conflict, enhances community participation and lowers investor risk by making revenue flows predictable[9].

Zambia's recent legislative reform in the Green Economy and Climate Change Act, 2024 marks an important formal recognition of carbon trading within national climate governance. Yet while the Act expressly contemplates community benefit and development agreements, it refrains from specifying the content, form or enforceable standards of those agreements, instead vesting the substantive mechanics to subsidiary regulations that, at the time of writing, remained to be promulgated. Those regulations have since been issued as the Green Economy and Climate Change (Carbon Market) Regulations, 2026 (Statutory Instrument No. 5 of 2026), which now prescribe a tiered share-of-proceeds formula, a standardised community development and benefit-sharing agreement template, and reporting obligations for project proponents[10]. The Forests Act 2015 (Act No. 4 of 2015) and associated carbon stock management regulations also govern certain forest-based carbon activities, but the relationship between these instruments and the new climate statute raises questions of continuity and potential duplication rather than providing a single, coherent set of distributive rules.[11]

Recent comparative analyses of carbon-market regulation in Africa suggest that Zambia's legislative ambivalence is not unique, but that it is increasingly out of step with an emerging continental trend toward more explicit and structured benefit-sharing regimes. A number of African states have moved to codify, in primary or subsidiary legislation, detailed rules governing entitlement, revenue allocation and community participation in carbon projects, an experience this study examines in detail in Chapter Four. That experience underscores a central insight of the literature: where benefit-sharing rules are clearly articulated in law they enhance transparency and predictability, whereas vague or volatile regulatory approaches tend to exacerbate distributive conflict and governance risk.

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[8] Rosemary Lyster, Climate Justice and Disaster Law (Cambridge University Press 2015).
[9] Section 27
[10] See Forests Act, 2015 (Act No. 4 of 2015) (Zambia) and The Forests (Carbon Stock Management) Regulations, Statutory Instrument (SI) 66 of 2021; FAO/LEG database, *The Forests Act, 2015* (Government of the Republic of Zambia) http://www.fao.org/faolex/results/details/en/c/LEX-FAOC208709/ accessed 7 December 2025
[11]https://www.jstor.org/stable/resrep63281.9 Forests Act 2015 (Act No 4 of 2015) (Zambia); Forests (Carbon Stock Management) Regulations, Statutory Instrument No 66 of 2021 (Zambia).

This statutory silence presents a doctrinal problem of the kind that legal scholarship has long highlighted: when primary legislation defers essential elements of rights and obligations to regulations, the principles of legal certainty and parliamentary accountability can be undermined. The consequence both in theory and in practice is that affected communities and landowners may find themselves without legally enforceable entitlements, while developers and public authorities are left without clear legal standards by which benefits should be calculated, monitored and distributed. Empirical studies of Reducing Emissions from Deforestation and Forest Degradation (hereinafter 'REDD+') and voluntary carbon initiatives in southern Africa corroborate these concerns, showing that vague legal frameworks correlate with uneven benefit outcomes and weakened community trust.[12]

Against this backdrop, the present study adopts a doctrinal approach to interrogate how Zambia's legal framework currently addresses benefit-sharing approach in land-based carbon projects and to assess whether legislative design provides the necessary clarity and enforceability. It also examines the relevant texts and subsidiary instruments, evaluates the adequacy of the legal mechanisms for allocating and enforcing benefits and draws principled lessons from comparative doctrine and practice to propose reforms that would better align Zambia's law with constitutional values of equity, participation and accountability. In doing so the research responds to the pressing questions of how statutory architecture can transform policy rhetoric about benefit-sharing into binding legal standards capable of securing both justice for communities and predictability for market actors.

These concerns are especially pressing in Zambia. The country carries one of the higher rates of deforestation in the region and has, for over a decade, participated in results-based forest carbon and REDD+ readiness initiatives, generating expectations among forest-dependent communities about the benefits that carbon finance would bring.[13] Across the continent, voluntary and compliance carbon markets have expanded rapidly and a number of African states have moved to legislate the terms on which the resulting revenues are shared.[14] It is against this backdrop of rapid market growth, a significant forest endowment and a decade of REDD+ piloting that Zambia enacted the Green Economy and Climate Change Act, 2024, and

[12] Ibid (n 3)
[13] Ibid (n 1)
[14] Section 22 of the GEEC Act

it is the adequacy and certainty of that Act, and of the subsidiary Carbon Market Regulations made under it, in securing equitable benefit-sharing that this study interrogates.[15]

1.3 Statement of the Problem

Equitable benefit-sharing in land-based carbon projects depends on clear, certain and enforceable rules on how the proceeds are allocated among the parties to the project, namely the State, the project developer and the host community. Zambia's framework does not provide them. The Green Economy and Climate Change Act, 2024, in section 21(7) read with subsection (8), requires a community development and benefit-sharing agreement signed by the Government, the community and the developer, but only 'where applicable', a trigger it does not define, and it does not state how the benefits are to be divided among the three parties, deferring the content to be 'prescribed'. Section 22 compounds the difficulty by vesting carbon in the President without defining the derivative entitlements of communities and landowners. The Green Economy and Climate Change (Carbon Market) Regulations, 2026 (Statutory Instrument No. 5 of 2026) do not cure these defects. The share of proceeds in regulation 21 and the Third Schedule is a State levy, calculated by volume rather than by value, and it applies only to credits that request a corresponding adjustment, that is, the Article 6 segment; it is not a benefit-sharing allocation to communities or landowners or project developers. Regulation 22 and Form II then require the parties merely to propose a Benefit Sharing Factor, fixing no minimum community share, no benchmark and no formula for the split. A further gap follows from the limited reach of the regime: most of Zambia's current land-based carbon activity takes place on the voluntary market under standards such as Verra, while the State is only positioning itself for Article 6 transfers, so the one share the law actually fixes does not even reach the bulk of present activity. The result is that benefit-sharing is recognised in form but not secured in substance: the State's share is certain but narrow, while the developer's and the community's shares are left to negotiation between parties of markedly unequal bargaining power. This study therefore asks whether Zambia's regulatory framework is adequate and certain enough to deliver equitable benefit-sharing among all stakeholders in land-based carbon projects, and how it should be reformed if it is not.[16]

[15] William Boyd, 'Climate Change, Fragmentation and Global Environmental Law' (2010) 32 *J Envtl L* 457.
[16] Ibid (n2)

1.4 Research Objectives

The Objectives of this research are to:

1. Analyse the current legal framework governing benefit-sharing in land-based carbon projects in Zambia, being the primary jurisdiction of the study, with particular reference to the Green Economy and Climate Change Act, 2024, the forest Act and the Carbon Market Regulations (SI No. 5 of 2026);
2. Analyse the adequacy of the existing legal framework in ensuring certainty, fairness, transparent and enforceable benefit sharing among all relevant stakeholders, and
3. Draw lessons from selected jurisdictions with more developed benefit-sharing mechanisms in carbon governance, namely Kenya and Tanzania, from which the comparative data for this study are drawn, highlighting principles that could guide Zambia's approach.

1.5 Research Questions

The following are the research questions:

1. What is the current legal framework governing benefit sharing in land-based carbon projects in Zambia under the Green Economy and Climate Change Act and the Carbon Market Regulations (SI No. 5 of 2026)?
2. How adequate, certain and enforceable are the existing provisions in ensuring equitable benefit sharing among key stakeholders?
3. What lessons can Zambia draw from other jurisdictions with well-developed benefit sharing mechanisms in carbon governance?

1.6 Significance of the Study

This study provides the first sustained analysis of how Zambia's new carbon governance framework treats benefit sharing. Working through the legislation, it pinpoints the gaps, above all the absence of clear statutory principles on how benefits are to be determined and shared, that presently weakens fairness, legal certainty and stakeholder confidence in carbon projects. The findings are intended to be of practical use to policy makers and legislators as Zambia takes its place in the global carbon market. By identifying what needs to be settled in the primary Act than deferred to regulation, the study seeks to guide reforms that would deliver fair and transparent benefit-sharing for developers, landowners, communities and the state alike.

1.7 Scope and Limitations of the Study

The study is centred on the law governing benefit-sharing in land-based carbon projects in Zambia. It works through the Green Economy and Climate Change Act, the Forests Act 2015, the Forests (Carbon Stock Management) Regulations and the Green Economy and Climate Change (Carbon Market) Regulations, 2026 (SI No. 5 of 2026), asking how far each supplies clear, enforceable and fair means of allocating benefits between developers, the State, communities and landowners. Its concern is with legal design, statutory interpretation and doctrinal coherence, rather than with the scientific or technical questions of how carbon is measured, verified or generated. It draws on a small number of other jurisdictions and on international scholarship not to compare for its own sake, but to extract principles capable of informing Zambia's approach.

In short, the study asks how benefit-sharing is, or is not, built into Zambian law, and what reforms would strengthen fairness, predictability and certainty for those involved. It is concerned with the structural question of how the law allocates entitlements and obligations in carbon governance, and how legislative design can support fair and transparent outcomes.

The principal limitation is the newness of the framework. The Green Economy and Climate Change Act, 2024 is recent, and the Carbon Market Regulations (SI No. 5 of 2026) that give it operational content were made only shortly before this study, so there is as yet no case law, regulatory guidance or settled practice to draw on, which constrains how far the study can speak to implementation. A second limitation is the scarcity of Zambian case law, scholarship and publicly available benefit-sharing agreements; while the international literature on carbon rights, environmental justice and benefit-sharing is rich, work addressing Zambia directly remains thin. The analysis therefore relies heavily on statutory interpretation and reasoning to fill the space left by limited local empirical material.

1.8 Research Methodology

This research adopts a qualitative, doctrinal methodology. As a study of legal design rather than of measured outcomes, it proceeds principally through the close reading and interpretation of primary legal materials. The primary sources comprise the Constitution of Zambia, the Green Economy and Climate Change Act, 2024 and the Green Economy and Climate Change (Carbon

Market) Regulations, 2026, together with the Forests Act, 2015 (Act No. 4 of 2015) and the Forests (Carbon Stock Management) Regulations, 2021, which retain a residual role in forest-based carbon activities. These instruments are read against the comparator legislation of Kenya and Tanzania, namely the Climate Change Act and the Climate Change (Carbon Markets) Regulations of Kenya and the Environmental Management (Control and Management of Carbon Trading) Regulations of Tanzania.

The study also draws on secondary sources, including books, journal articles, institutional reports, policy documents and reputable online materials, both to construct the conceptual and theoretical framework and to inform the comparative analysis. From the literature and the applicable international instruments, the study distils six evaluative criteria, namely clarity of carbon rights, statutory specificity, enforceability, transparency and accountability, participation, and constitutional alignment, which serve as the analytical lens against which the adequacy and certainty of the Zambian framework, and the lessons drawn from the comparator jurisdictions, are assessed. The research is entirely desk-based and does not involve fieldwork, the collection of primary empirical data or human participants.

1.9 Literature Review

The literature on benefit-sharing in carbon governance has expanded rapidly as carbon trading has matured from a voluntary, project-based practice into a regulated asset class. Three bodies of work bear on this study: the legal-justice scholarship on why distribution must be embedded in binding law; the empirical and political-economy scholarship on how carbon markets actually perform and why communities are so often left out; and the comparative and constitutional scholarship on how African states are now legislating benefit-sharing. This review engages each in turn and positions the present study within them.

Lyster argues that equitable benefit-sharing has become the cornerstone of climate-justice discourse, observing that although carbon markets have channelled finance to the Global South they have rarely guaranteed that host communities receive a fair portion, and that domestic law must move beyond voluntary project agreements to embed enforceable distribution mechanisms.[17] This study adopts that proposition as its premise, but narrows it to Zambia's statutory framework, contending that a framework which leaves benefit-sharing to subsidiary regulation reproduces at the national level the very weakness Lyster identifies internationally. Savaresi

[17] Rosemary Lyster, *Climate Justice and Disaster Law* (Cambridge University Press 2015).

develops the same theme from a rights perspective, locating benefit-sharing within the emerging body of obligations under the climate regime and arguing that it acquires legal rather than merely moral force only when it is operationalised through binding standards rather than discretionary practice.[18] The present research applies Savaresi's insight doctrinally: in Zambia, benefit-sharing is acknowledged in the Act but not operationalised in law, and therefore remains, on her analysis, aspirational.

A more recent and, for this study, indispensable body of empirical work explains why the design of benefit-sharing and the clarity of the rules governing it are not technicalities but determinants of whether carbon projects deliver anything at all. The World Bank records that carbon-pricing instruments mobilised over US$100 billion in 2023 and that the market continues to grow, which raises the stakes of getting the distributive rules right.[19] Yet a landmark meta-analysis by Probst and colleagues, published in Nature Communications in 2024, systematically reviewed more than sixty studies covering close to a billion tonnes of credits and found that fewer than sixteen per cent of the credits examined corresponded to real emission reductions, with forest and REDD+ projects among the worst performers.[20] This research is significant for Zambia because it demonstrates that where the rules governing measurement, entitlement and distribution are weak or discretionary, the result is not merely inequity but a collapse of environmental integrity. In direct response to this crisis, the Integrity Council for the Voluntary Carbon Market has issued Core Carbon Principles requiring, among other things, robust quantification and respect for the rights of affected communities,[21] and the Öko-Institut has assessed the transparency and integrity of benefit-sharing arrangements in the voluntary market and found them frequently opaque and discretionary.[22] This study draws on that work to argue that Zambia's failure to prescribe how benefits are calculated and shared exposes it to precisely the integrity and legitimacy risks these recent studies document.

A second and recurring theme is that benefit-sharing is only as secure as the carbon rights on which it rests. Streck demonstrates that where the law does not clearly state who owns the sequestered carbon and the right to sell credits, both governments and developers are able to

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[18] Annalisa Savaresi, 'The Emergence of Benefit-Sharing under the Climate Regime: A Preliminary Exploration and Research Agenda' (2016)
[19] World Bank, *State and Trends of Carbon Pricing 2024* (World Bank 2024)
[20] Benedict S Probst and others, 'Systematic Assessment of the Achieved Emission Reductions of Carbon Crediting Projects' (2024) 15 Nature Communications
[21] Integrity Council for the Voluntary Carbon Market, *Core Carbon Principles* (ICVCM 2023)
[22] Öko-Institut, *Transparency and Integrity of Benefit-Sharing Arrangements in the Voluntary Carbon Market* (Öko-Institut 2023).

appropriate the resulting benefits at the expense of forest-dependent communities.[23] Birben argues, applying property-rights theory to forest carbon in a 2025 study, show that the bundle of rights recognised in publicly owned forests is frequently too thin to guarantee that communities benefit, even where their tenure is nominally recognised.[24] Most strikingly, the Rights and Resources Initiative, in a 2025 comparative assessment of thirty-one tropical-forest countries holding the bulk of the world's forest carbon, found that a majority still lack legislation clearly defining carbon rights and that nearly half make no statutory provision for community consent.[25] These findings bear directly on Zambia, whose Act vests carbon in the President without articulating the derivative entitlements of communities and landowners, producing exactly the ambiguity this literature identifies as the principal mechanism through which communities are displaced from the carbon value chain.

On the design of benefit-sharing itself, Wong, Luttrell, Loft and colleagues provide the leading recent analysis. Examining benefit-sharing narratives within and beyond the forest sector, they identify competing equity rationales, namely legal rights, emission reductions, stewardship, cost compensation, facilitation and pro-poor distribution, and show that several operate at once within a single jurisdiction, complicating the design of coherent rules.[26]Crucially, they demonstrate that where allocation is left to discretion rather than fixed in law, benefit distribution tracks the distribution of power rather than of rights, producing elite capture and a loss of legitimacy. This study builds directly on that finding it is the absence of a stated legal basis for allocation in Zambia, not the absence of value, that exposes communities to capture, and an adequate framework must therefore state in law who is entitled to benefit and on what basis.

A distinctively recent and regionally specific literature has emerged on the risk that carbon offsetting becomes a new form of land dispossession in Africa. The International Institute for Sustainable Development warns that large-scale carbon-offset deals concluded without secure tenure and meaningful consent risk amounting to "green grabbing", displacing the very communities they purport to benefit.[27] Scholarship in the Review of African Political Economy

[23] Charlotte Streck, 'Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance' (2020) 11(9) *Forests* 959.
[24] Üstüner Birben, Osman Devrim Elvan, Atakan Aydın, Dalia Perkumienė, Mindaugas Škėma and Marius Aleinikovas, 'Property Rights for Forest Carbon: A Conceptual Perspective' (2025) 17(2) *Sustainability* 442.
[25] Rights and Resources Initiative, *Status of Legal Recognition of Indigenous Peoples', Local Communities' and Afro-descendant Peoples' Rights to Carbon Stored in Tropical Lands and Forests* (RRI 2025)
[26] Grace Y Wong, Cecilia Luttrell, Lasse Loft, Anastasia Yang, Thu Thuy Pham, Daisuke Naito, Samuel Assembe-Mvondo and Maria Brockhaus, 'Narratives in REDD+ Benefit Sharing: Examining Evidence within and beyond the Forest Sector' (2019) 19(8) *Climate Policy* 1038
[27] International Institute for Sustainable Development, 'Carbon Offset Deals and the Risks of "Green Grabbing"' (IISD 2024).

frames the recent surge of continental carbon deals as a new scramble for African land, in which vast areas are leased for offsetting on terms that local communities neither set nor understand.[28] This literature is of immediate relevance to Zambia, where reports of very large land-based carbon arrangements and of community concern over seized farmland and uneven benefits illustrate the danger of proceeding without clear statutory entitlements. This study treats that danger as the practical stake of its doctrinal argument: weak benefit-sharing law is the legal precondition of green grabbing.

The literature also connects distributive clarity to market credibility, showing that the case for clear benefit-sharing rules is not only a justice case but a market case. Streck argues that carbon markets require credible institutions, clearly defined property rights and enforceable contracts if they are to attract finance,[29] and Meyer adds that carbon pricing and trading regimes function only where the governing rules are clear, predictable and enforceable.[30] This study extends their insight domestically: Zambia's legislative silence on the substance of benefit-sharing undermines community trust and investor confidence simultaneously, and clarity in the law would advance social justice and market stability together rather than trading one off against the other.

Comparative African scholarship sharpens the inquiry and supplies models. Muigua commends Kenya's codification of an explicit benefit-sharing entitlement, under which land-based projects must direct a statutory minimum of the earnings to communities, as good legislative practice, while cautioning that prescriptive ratios are productive only where they rest on clearly defined ownership, or they redistribute uncertainty rather than wealth.[31] Mabele, examining Tanzania's experience, applauds the requirement for benefit-sharing plans but criticises the absence of effective enforcement, a caution that this study reads as directly applicable to Zambia's 2026 Regulations.[32] Dev situates these national developments within a continental trend toward codifying entitlement, allocation and participation, against which Zambia's reliance on a discretionary template is increasingly out of step. [33] Together these works allow the study to use

[28] 'Carbon Markets and the New Scramble for African Land' (*Review of African Political Economy*, 30 October 2024).
[29] Charlotte Streck, 'Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance' (2020) 11(9) Forests 959.
[30] Timothy Meyer, 'Taxing, Regulating, and Trading Carbon: An Introduction to the Symposium' (2022) 116 *AJIL Unbound* 191
[31] Kariuki Muigua, 'Realizing Equitable Benefit Sharing in Kenya' (2023) *Journal of Conflict Management and Sustainable Developmen*
[32] Mathew Bukhi Mabele, 'Learning from the Other: Benefit-Sharing Lessons for REDD+ Implementation Based on CBFM Experience in Northern Tanzania' (2020) 97 *Land Use Policy* 104222
[33] Trishant Dev, 'Regulatory Interventions by Governments in Africa' in *Carbon Markets in Africa: An Overview* (Centre for Science and Environment 2024).

Kenya and Tanzania not as templates for wholesale transplantation but as sources of tested legislative technique.

From a constitutional perspective, Kameri-Mbote, Kibugi and Kabira argue that the equitable sharing of benefits from natural resources is an incident of the constitutional right to a clean and healthy environment and of the principles of equality and participation, and that statutes must give those constitutional commitments operational content.[34] Applied to Zambia, where Article 255 of the Constitution enshrines the equitable use of natural resources for present and future generations, this supports the study's contention that Parliament's omission to define benefit-sharing in primary law is not merely a policy gap but raises a question of constitutional legality, since essential matters affecting rights ought to be settled by Parliament rather than delegated without standards to the executive.

Turning to Zambia directly, current commentary by the Policy Monitoring and Research Centre recognises the Green Economy and Climate Change Act as a welcome formalisation of carbon trading while lamenting its thin treatment of benefit-sharing and carbon rights, and notes that the substantive allocation has been deferred to subsidiary regulation.[35] This study builds on that commentary and advances it doctrinally, arguing that such delegation may itself be ultra vires the constitutional requirement that essential matters of rights be legislated by Parliament rather than settled by ministerial decree, and demonstrating, through close reading of the 2026 Regulations, that the deferral has not in fact produced the substantive rules the Act promised.

The South African experience offers a further comparative caution. Gilder, Rumble and Rambharos show that fiscal instruments such as a carbon tax, while important, cannot by themselves secure distributive justice and must be accompanied by complementary mechanisms that direct value to affected communities.[36] Zambia's challenge, however, is anterior to the fiscal question: it must first clarify who is entitled to benefit, and on what basis, before any redistributive or fiscal design can operate fairly.

Finally, from a broader environmental-law perspective, Fisher and Scotford show that modern environmental statutes increasingly integrate procedural, substantive and distributive

[34] Patricia Kameri-Mbote, Robert Kibugi and Nkatha Kabira (eds), *Environmental Governance in Kenya: Implementing the Constitutional Framework* (University of Nairobi Faculty of Law 2023).
[35] Policy Monitoring and Research Centre, *Securing Zambia's Sustainable Future amidst Changing Climatic Conditions: Unpacking the Green Economy and Climate Change Act No. 18 of 2024* (PMRC 2025)
[36] Andrew Gilder, Olivia Rumble and Mandy Rambharos, *Climate Change Law and Governance in South Africa* (Juta 2016).

obligations within a single coherent framework.[37] Measured against this trend, Zambia's Act, which builds an elaborate procedural and institutional architecture for carbon trading while omitting the substantive distributive provisions, is incomplete by the standards of contemporary environmental legislation.

The literature thus converges on a single conclusion: effective benefit-sharing depends on legislative clarity, and where clarity is absent the consequences are inequity, elite capture, dispossession and a loss of both environmental integrity and market confidence. Yet the scholarship still differs on the optimal instrument, and almost none of it addresses Zambia's post-2024 framework in detail. This study occupies that gap. It positions itself with those who advocate explicit statutory codification anchored in clearly defined carbon rights, and it contributes to the doctrinal scholarship by testing Zambia's new Act and Regulations, provision by provision, against criteria drawn from this recent literature, and by proposing a statutory model grounded in the constitutional principles of equity, sustainable development and participation.

1.10 Ethical Considerations

No significant ethical concerns arise, because the study draws on publicly available legal materials and policy documents rather than on human participants or personal data. Should any confidential or sensitive material be encountered while gathering sources, it will be handled in confidence so that no individual or community is placed at risk.

1.11 Chapter Outline

Chapter One introduces the study through its background, statement of the problem, objectives, research questions, significance, scope and limitations, methodology and literature review. Chapter Two sets out the conceptual and theoretical foundations of benefit-sharing in carbon governance and develops the principles that become the criteria for assessing Zambia's framework. Chapter Three applies those criteria to the Zambian legal framework, namely the Green Economy and Climate Change Act, 2024, the Forests Act, the Carbon Stock Management Regulations and the Carbon Market Regulations (SI No. 5 of 2026), and evaluates how far they secure fair, transparent and enforceable benefit-sharing. Chapter Four draws lessons from selected jurisdictions with more developed benefit-sharing mechanisms. Chapter

[37] Elizabeth Fisher and Eloise Scotford, *Environmental Law: Text, Cases and Materials* (2nd edn, Oxford University Press 2019).

Five presents the findings, conclusions and recommendations, drawing together the study's assessment of the framework in terms of fairness, predictability and accountability.

1.12 Conclusion

This chapter has explained why Zambia's emerging carbon market needs a clearer and stronger legal foundation for benefit-sharing. Although the existing law recognises a role for communities and developers, it says little about how benefits are actually to be allocated, determined or enforced, and that silence poses risks to fairness, legal certainty, investor confidence and community trust. The study accordingly aims to give policymakers a sound doctrinal basis for designing fair and predictable benefit-sharing arrangements, and so to contribute to a carbon-governance system that is legally coherent, socially just and able to support carbon projects in Zambia.

CHAPTER TWO: CONCEPTUAL AND THEORETICAL FRAMEWORK FOR BENEFIT-SHARING

2.1 Introduction

Benefit sharing in land-based carbon projects is not just a matter of policy preference; it is a moral and legal requirement based on sustainable development, distributive justice and constitutional governance[38]. It reflects a wider understanding that carbon markets cannot accomplish their environmental and developmental goals unless the communities and landowners who bear the costs of land-use restrictions and ecological stewardship are given legally enforceable entitlements to the financial and non-financial returns that those restrictions and services generate[39]. This understanding is now established in both domestic legal scholarship and international climate governance. To treat benefit-sharing as an afterthought as something to be determined through contract negotiation or administrative discretion after the architecture of the carbon market has already been constructed is to misunderstand both its legal character and its practical importance.

The rise of voluntary and compliance carbon markets has produced literature analysing the distribution of carbon trading proceeds and how they should be. The distribution of carbon

[38] Sienna Healy, Melanie Pietschmann, Lambert Schneider and Ankita Karki, *Assessing the Transparency and Integrity of Benefit Sharing Arrangements Related to Voluntary Carbon Market Projects* (Öko-Institut e.V., November 2023) https://www.oeko.de/fileadmin/oekodoc/Assessing-transparency-and-integrity-of-benefit-sharing-arrangements-related-to-voluntary-carbon-market-projects.pdf accessed 8 March 2026
[39] Ibid

revenues typically reflects the distribution of power rather than the distribution of rights when legal frameworks are unable to precisely and clearly define benefit entitlements.[40] In jurisdictions without minimum standards, developers and state agencies have routinely obtained the best terms because they have the institutional capacity and legal resources that communities usually lack. The result is a pattern of uneven outcomes that has been documented across REDD+ programs in Africa, Asia, and Latin America. This has caused social conflict, damaged community trust, and, in certain cases, compromised the environmental integrity of the projects themselves.[41]

In light of this, any thorough legal analysis of benefit-sharing must start with the concepts and tenets that give the idea its normative content rather than the statute in question. The legal system does not function in a vacuum. Whether intentionally or not, underlying presumptions about justice, rights, institutional competence and the proper relationship between the state, private actors and communities influence the decisions made by legislators regarding what should be included in primary legislation, what should be delegated to regulations and what should be left to contract. One must first specify the criteria by which adequacy is to be evaluated in order to determine whether those options are sufficient. That is the purpose of this chapter.

Before Chapter Three can assess whether Zambia's framework adequately provides for benefit-sharing, the conceptual and theoretical foundations against which that framework is to be evaluated must be established. This chapter does that work. It defines benefit-sharing and identifies the principal stakeholders; engages the theoretical frameworks that animate the debate, namely distributive justice, fiduciary and stewardship theory, property rights theory and political economy; examines the principles that have crystallised in international practice, including equity, legal certainty, transparency, participation and subsidiarity; considers the relationship between carbon rights and distributive entitlement and the constitutional dimensions of benefit-sharing in Zambia; and synthesises these into the six evaluative criteria applied in the chapters that follow. The analysis is therefore constitutive of the study's critical framework rather than merely preliminary.

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[40] William Boyd, 'Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance' (2010) 37 Ecology Law Quarterly 843, 901.
[41] Arild Angelsen and others (eds), Analysing REDD+: Challenges and Choices (CIFOR 2012) 195–200.

2.2 Definition and Scope

2.2.1 Benefit-sharing

As a legal concept, benefit-sharing defies easy categorisation. In its broadest sense, it refers to the method by which the parties with legal, moral, or customary claims to a shared resource divide the benefits both monetary and non-monetary that come from using it.[42] Benefit-sharing in the context of land-based carbon projects refers to the institutional and legal arrangements that distribute project developers, the state, landowners and host communities the proceeds from the sale of carbon credits as well as ancillary benefits like employment, ecosystem services, and community development.[43] It is important to distinguish benefit-sharing from the related but distinct concept of benefit distribution. Benefit distribution is often administrative, process of transferring revenues after they have been generated, whereas benefit-sharing is the normative framework, ideally grounded in law that determines entitlement, the basis of allocation and the mechanisms for enforcement.[44] This distinction matters enormously in this legal study where distribution is governed only by administrative discretion or contractual negotiation, affected communities lack legally enforceable entitlements and remain vulnerable to capture by more powerful actors. It is the transformation of benefit-sharing from an aspiration into an enforceable legal standard that this research is concerned with.

2.2.2 Economic and Non-Economic Benefits

Scholarship and international practice identify two broad categories of benefits arising from carbon projects. Economic or financial benefits include revenues from carbon credit sales, royalties, taxes and levies, direct payments to landowners or communities and contributions to community development funds.[45] Non-economic benefits include employment and livelihood opportunities, capacity building, infrastructure development, enhanced tenure security and

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[42]Morgera, E. (2016). The need for an international legal concept of fair and equitable benefit-sharing. *European Journal of International Law*, *27*(2), 353–383.https://pure.strath.ac.uk/ws/portalfiles/portal/55353399/Morgera_EJIL2016_need_for_an_international_legal_concept_of_fair_and_equitable_benefit_sharing.pdf Charlotte Streck, 'Making Markets Work: A Review of CDM Performance and the Need for Reform'

[43] Sven Wunder, 'Payments for Environmental Services: Some Nuts and Bolts' (CIFOR Occasional Paper No42, 2005) 3.

[44]https://www.forestcarbonpartnership.org/bio-carbon/Printable_version_script_2_27_final.pdf Cecile Luttrell and others, 'Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance' (2012) 7(6) Forests 755, 757.

[45] Frances Seymour and Jonah Busch, Why Forests? Why Now? The Science, Economics and Politics of Tropical Forests and Climate Change (Center for Global Development 2016) 201.

improved access to ecosystem services.[46] Both categories are legally significant. A benefit-sharing framework that attends only to revenue allocation while ignoring non- economic entitlements will fail to capture the full range of interests and may miss constitutionally protected values such as participation, livelihood security and the right to development.

2.3 Key Stakeholders in Carbon Benefit-Sharing

Any credible benefit-sharing framework must be premised on a clear identification of the parties whose interests are to be reconciled. In land-based carbon projects, four principal categories of stakeholders are typically recognised. Project developers whether private corporations, non-governmental organisations or public entities are the parties who design, finance and implement carbon projects. They bear the upfront costs of project development, monitoring and verification, and their commercial viability depends on predictable revenue flows from carbon credit sales.[47] The state which retains sovereign authority over natural resources, including forests and the carbon sequestered within them, under the doctrine of public trusteeship. In Zambia, this is reflected in Section 22 of the Green Economy and Climate Change Act No 18 of 2024, which vests carbon in the President on behalf of the Republic. The state's interests encompass revenue generation, climate target compliance under the Paris Agreement, and the broader public interest in environmental integrity.

Landowners both private and customary are another category of stakeholders crucial to the aspect of benefit sharing in carbon land-based projects. They provide the land upon which carbon projects are established. Their legal relationship to the carbon asset is frequently ambiguous, particularly in jurisdictions such as Zambia where customary land rights are not always formally documented and where the relationship between land ownership and carbon rights has not been legislatively clarified. Host communities are the local populations residing in or around project areas. They often bear the social and ecological costs of land-use restrictions imposed by carbon projects such as limits on agricultural activities or access to forest resources while being the least empowered actors in project negotiations. The equitable treatment of host communities is widely regarded as the central challenge of carbon benefit-sharing.

[46] Luttrell and others (n 3) 761.
[47] Charlotte Streck and Jolene Lin, 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) 19(2) European Journal of International Law 409, 415.-Ibid

2.4 Theoretical Frameworks

2.4.1 Distributive Justice

Distributive justice is the most fundamental theoretical framework used to analyse benefit-sharing. Distributive justice, which is based on John Rawls' political theory, addresses the equitable distribution of costs and rewards within a community[48]. According to Rawls's difference principle, social and economic disparities are only acceptable when they greatly benefit the most disadvantaged members of society. When it comes to carbon governance, this principle suggests that the money made from carbon projects which are largely made possible by all stakeholders' ecological stewardship and land-use restraint should be allocated in a way that gives priority to those communities, who are usually the most economically disadvantaged.

Applying this reasoning to climate justice, Lyster contends that although international carbon mechanisms have produced substantial financial flows to the Global South, they have seldom made sure that host communities receive a fair portion of the proceeds.[49] She contends that domestic law must embed enforceable distributive mechanisms rather than relying on voluntary project agreements. This is in line with this study, where the law provides no binding standards for allocation, benefit-sharing remains an aspiration subject to the bargaining power of the parties, which invariably disadvantages communities.

2.4.2 Fiduciary and Stewardship Theory

A second theoretical framework of considerable relevance is fiduciary theory as applied to state control over natural resources. Okoth-Ogendo's seminal analysis of African land tenure systems demonstrates that many post-colonial legal orders vest natural resources in the state on behalf of the people but fail to articulate the fiduciary obligations that accompany such trusteeship.[50] The consequence, as he starkly observes, is that communities become tenants of their own land nominally the beneficiaries of state trusteeship, but practically without enforceable claims against the sovereign. This critique is directly applicable to carbon governance in Zambia. As earlier stated, Section 22 of the GECC Act 2024 vests carbon in the President, but neither the Act nor any associated instrument prescribes how the fiduciary duty to distribute benefits is to be discharged. If the state holds carbon resources in trust, the law must specify the terms of

[48] John Rawls, A Theory of Justice (revised edn, Harvard University Press 1999) 65–73.
[49] Rosemary Lyster, Climate Justice and Disaster Law (Cambridge University Press 2015).
[50] HWO Okoth-Ogendo, Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya (ACTS Press 1991) 53–75

that trust: who the beneficiaries are, what they are entitled to receive and how and when distributions shall be made.

Stewardship theory complements this analysis by recognising that communities and landowners who have historically managed forest resources have a legitimate claim to benefit from the carbon value of those ecosystems not merely as a matter of generosity, but as recognition of their active stewardship role. This rationale supports the inclusion of stewardship-based benefit entitlements in any statutory framework, grounded not in the reciprocal logic of reward for conservation services rendered.

2.4.3 Property Rights Theory

A third theoretical perspective concerns the relationship between property rights and benefit-sharing. Clear and well-defined property rights are widely regarded, following Coase's foundational insight, as a prerequisite for efficient resource allocation.[51] In the context of carbon, the relevant question is who owns the carbon stored in trees and soils and what rights flow from that ownership? Cotula's analysis of carbon and biodiversity contracts in African states demonstrates that uncertainty over carbon asset ownership allows both governments and private developers to appropriate benefits at the expense of rural landholders.[52]

Where the law does not clearly define whether carbon rights are in the state, the landowner or the community, benefit-sharing arrangements are negotiated against a background of ambiguity that systematically disadvantages those with the weakest legal standing[53]. The property rights theory is an analytical tool that can be used to examine Zambia s legislative treatment of carbon ownership. It is argued that the absence of derivative entitlements flowing from the state's vesting of carbon that is, the failure to specify what rights project developers, communities and landowners retain creates precisely the ambiguity that Cotula identifies as the principal source of distributive injustice in African carbon markets.

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[51] Ronald Coase, 'The Problem of Social Cost' (1960) 3 Journal of Law and Economics 1.
[52]https://www.iied.org/sites/default/files/pdfs/migrate/12568IIED.pdf Lorenzo Cotula and James Mayers, 'Tenure in REDD: Start-Point or Afterthought?' (IIED 2009) 14.
[53] Lasse Loft and others, 'Taking Stock of Carbon Rights in REDD+ Candidate Countries: Concept Meets Reality' (2015) 6(4) Forests 1031, 1034–1038 https://doi.org/10.3390/f6041031

2.4.4 Political Economy Perspective

Political economy analysis situates carbon markets within broader structures of power and distributive conflict.[54] It has been contended that absence of clear statutory allocation ratios, benefit-sharing will unavoidably turn into a matter of power rather than law: wealthy developers and state agencies will obtain the majority of revenues, while communities without institutional capacity and legal entitlements will get whatever is left over after negotiations.[55] Market design by itself cannot ensure fairness; the law must specify the minimal distributive thresholds below which no negotiation may proceed. In Zambia, where institutional capacity is still limited and the regulatory framework for carbon markets is still in its infancy, this viewpoint is especially insightful. Further, communities will negotiate from positions of severe informational and legal disadvantage in the absence of statutory minimum standards. Thus, the argument made throughout this study is supported by the political economy lens. This legal clarity is structural safeguard against the concentration of carbon revenues in the hands of the most powerful actors.

2.5 Principles Governing Benefit-Sharing

Building on the theoretical foundations outlined above, scholarship and international practice have identified a cluster of principles that ought to govern any credible benefit-sharing framework. These principles serve as the evaluative criteria against which Zambia's legal framework will be assessed in Chapter Three.

2.5.1 Equity and Fairness

Equity demands that the distribution of benefits reflect the contributions, needs and rights of all relevant stakeholders. Luttrell et al. identify six equity rationales that commonly underpin benefit-sharing claims in REDD+ and related mechanisms: legal rights, emission reductions, stewardship, cost compensation, facilitation and pro-poor distribution.[56] Each rationale is grounded in a different theory of distributive justice libertarian, merit-based or needs-based and different actors will advance different rationales depending on their interests and histories. An adequate legal framework must engage with this complexity rather than treating equity as

[54] William Boyd, 'Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance' (2010) 37 Ecology Law Quarterly 843.
[55] Ibid
[56] Cecilia Luttrell and others, 'Who should benefit from REDD+? Rationales and realities' (2013) 18(4) *Ecology and Society*52, 54–56

a self-evident concept. Equity in benefit-sharing therefore demands explicit statutory attention to who is entitled to benefit, on what basis and in what proportion.

2.5.2 Legal Certainty and Predictability

Legal certainty requires that the rights and obligations of all parties be defined with sufficient precision that they can be reliably relied upon and enforced.[57] In the carbon market context, Streck emphasises that markets function effectively only where there is clarity on revenue allocation, property rights and legal recourse.[58] Legal uncertainty not only harms communities by leaving their entitlements undefined it also undermines investor confidence by introducing regulatory risk into project planning. A benefit-sharing framework that depends on ministerial discretion to determine its substantive content fails this principle because neither communities nor developers can plan on the basis of rules that have not yet been made.

2.5.3 Transparency and Accountability

Transparency requires that the processes by which benefits are calculated, allocated and distributed be open to scrutiny by all affected parties. Accountability demands that institutions responsible for administering benefit-sharing arrangements are answerable for their decisions and subject to oversight.[59] Empirical studies of REDD+ implementation in Indonesia demonstrate that where revenue-sharing arrangements lack transparency, they create structural risks including elite capture, perverse incentives and corruption.[60] A legally sound benefit-sharing framework must therefore incorporate disclosure obligations, independent monitoring and accessible grievance mechanisms.

2.5.4 Participation and Free, Prior and Informed Consent

Affected communities must be actively involved in the planning, negotiating, and oversight of benefit-sharing agreements in order to adhere to the principle of participation. According to the UN Declaration on the Rights of Indigenous Peoples and international human rights law, free, prior, and informed consent (FPIC) requires communities to freely consent to projects that impact their lands and resources before the project starts and based on sufficient information.[61] While acknowledging that procedural rights by themselves cannot ensure substantive equity,

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[57] Joseph Raz, The Authority of Law: Essays on Law and Morality (2nd edn, Oxford University Press 2009)
[58] Charlotte Streck, 'Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance' (2020) 11(9) Forests 959, 964–966
[59] Richard Macrory, Regulation, Enforcement and Governance in Environmental Law (Hart Publishing 2010) 45
[60] Arild Angelsen and others (eds), Analysing REDD+: Challenges and Choices (CIFOR 2012) 198.
[61] UN Declaration on the Rights of Indigenous Peoples (adopted 13 September 2007, UNGA Res 61/295)

Lyster emphasises that participation is a procedural safeguard of fundamental importance.[62] This study concurs that, in order for benefit-sharing to be meaningful rather than merely performative, participation is required but insufficient and must be supplemented by substantive statutory entitlements.

2.5.5 Subsidiarity

The principle of subsidiarity, in the administrative law sense, holds that decisions should be taken at the lowest level of governance capable of making them effectively.[63] In the carbon benefit-sharing context, this implies that communities and local authorities should have a meaningful role in determining how benefits are allocated and deployed at the local level, rather than having allocation decisions made exclusively by central government. Subsidiarity supports decentralised benefit-sharing models that vest real decision- making authority in communities, subject to minimum statutory standards set by Parliament.

2.6 International Frameworks Informing Benefit-Sharing

While this study is primarily concerned with domestic law, international frameworks provide important normative reference points that inform the principles discussed above.

2.6.1 The Paris Agreement and Article 6

The Paris Agreement of 2015 establishes the overarching international architecture for climate action, including the voluntary cooperation mechanisms under Article 6 which provide for internationally including the voluntary cooperation mechanisms under Article 6, which provide for internationally transferred mitigation outcomes (ITMOs) between states.[64] Article 6.2 requires that cooperative approaches promote sustainable development and ensure environmental integrity, while Article 6.4 establishes a centralised mechanism for carbon trading under the supervision of a UN body. The Paris Agreement does not prescribe domestic benefit-sharing arrangements, but it requires that participating states demonstrate that carbon trading activities contribute to sustainable development an obligation that cannot be met without equitable benefit-sharing at the local level.[65]

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[62] Rosemary Lyster, 'REDD+, Transparency, Participation and Resource Rights: The Role of Law' (2011)
[63] George A Bermann, 'Taking Subsidiarity Seriously: Federalism in the European Community and the United States' (1994) 94 Columbia Law Review 331.
[64] Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) UNTS 3156, art 6.
[65] Cotula and Mayers (n 16) 18.

2.6.2 REDD+ Safeguards

The REDD+ framework, developed under the UNFCCC, is the most directly relevant international instrument for forest-based carbon activities. The Cancun Safeguards, adopted in 2010, require that REDD+activities respect the rights of indigenous peoples and local communities, ensure the full and effective participation of relevant stakeholders, and promote the equitable sharing of benefits.[66] While these safeguards are not legally binding in international law, they represent a normative standard against which domestic frameworks are increasingly measured and to which Zambia has committed itself through its national REDD+ programme.

2.6.3 The UN Declaration on the Rights of Indigenous Peoples

The UN Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted in 2007, affirms the rights of indigenous and local communities to free, prior and informed consent in relation to decisions affecting their lands, territories and resources.[67] Kameri-Mbote argues that these rights have normative force beyond their declaratory status, particularly in constitutional systems that entrench the right to a healthy environment and equitable access to natural resources.[68] In Zambia's constitutional context, UNDRIP provides support for the argument that community participation in and consent to carbon projects is not merely good practice but a constitutionally reinforced obligation.

2.7 The Relationship Between Carbon Rights and Benefit-Sharing

A recurring theme in the literature is that benefit-sharing arrangements are only as strong as the underlying carbon rights upon which they rest. Where carbon rights are unclear or contested, benefit-sharing becomes a matter of discretion rather than entitlement.[69] The crucial question, who owns the carbon stored in forests and soils has been answered differently across jurisdictions. Some states vest carbon rights in the landowner as an incident of land ownership; others, including Zambia, vest carbon in the state as part of the broader public trusteeship of natural resources;[70] still others have adopted hybrid models that distinguish between surface

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[66] UNFCCC, 'The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' (Decision 1/CP.16, 2010) Appendix I.
[67] Constitution of Zambia (Amendment) Act 2016, art 255.
[68] Patricia Kameri-Mbote, 'Land Tenure, Land Use and Sustainability in Kenya: Towards Innovative Use of Property Rights in Wildlife Management' in Jeremy Alden Wily and others (eds), The Human Right to a Green Future (Cambridge University Press 2012) 156.
[69] Wesley Newcomb Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning* (Yale University Press 1919).
[70] Section 22

rights and carbon rights, or that recognise community carbon entitlements independently of land tenure. Cotula's analysis underscores the particular vulnerability of customary landholders in this regard. Where formal title to land is a prerequisite for asserting carbon rights, communities holding land under customary tenure as is common in rural Zambia may find themselves excluded from legal entitlement to carbon revenues despite being the primary stewards of the relevant ecosystems.[71] This has led scholars to argue that carbon rights frameworks must be designed with careful attention to the pre-existing tenure landscape, and it must affirmatively extend legal protection to customary rights-holders rather than defaulting to formal title as the basis of entitlement.

The relationship between carbon rights and benefit-sharing is therefore reciprocal: clearly defined carbon rights create the legal basis for enforceable benefit claims, while robust benefit-sharing provisions give practical content to those rights by specifying what their holders may expect to receive. A framework that addresses only one side of this relationship by creating benefit-sharing obligations without clarifying the underlying rights, or by defining carbon rights without specifying distributive consequences will be structurally incomplete.

2.8 Constitutional Dimensions of Benefit-Sharing in Zambia

In Zambia, benefit-sharing is not merely a matter of legislative policy but carries constitutional dimensions that Parliament is obliged to respect. Article 255 of the Constitution of Zambia (Amendment) Act 2016 enshrines the principle of sustainable development, including the equitable use of natural resources for the benefit of both present and future generations.[72] Arler argues that distributive justice is an operational principle of sustainability not merely a policy aspiration meaning that constitutional commitments to equitable resource use impose substantive obligations on the legislature to ensure that enabling legislation gives effect to those commitments.[73] Applied to carbon governance, this constitutional imperative means that Parliament bears a duty to translate the value of equitable resource distribution into enforceable statutory provisions. A statute that acknowledges carbon trading, recognises the existence of community interests, but declines to specify how those interests are to be protected leaving the matter to future ministerial regulations may be said to be normatively incomplete in

[71] Forests Act, 2015 (Act No. 4 of 2015) (Zambia); Forests (Carbon Stock Management) Regulations, Statutory Instrument No. 50 of 2021.

[72] Constitution of Zambia (Amendment) Act 2016, art 255.

[73] Arler, Finn, 'Principles of Sustainable Development, Distributive Justice and Sustainable Development.' Vol 1 In Encyclopedia of Life Support Systems (EOLSS).

constitutional terms. The constitutional values of participation and inclusiveness expressed in Article 1(3) and the broader Bill of Rights further reinforce the argument for substantive, participatory benefit-sharing provisions in primary legislation. If communities are to exercise their constitutional right to participate in decisions affecting their environment and resources, they must be equipped with enforceable legal entitlements rather than left dependent on administrative goodwill or contractual negotiation with more powerful counterparts.

2.9 Evaluative Criteria for Assessing Zambia's Legal Framework

The theoretical frameworks and principles canvassed in the preceding sections do not merely provide intellectual context; they yield concrete standards against which the adequacy of any domestic benefit-sharing framework can be measured. Drawing these threads together, this study advances six interrelated criteria that will guide the doctrinal assessment of Zambia's legal framework in the chapters that follow.

The first and most foundational criterion is the clarity of carbon rights. A benefit-sharing regime can only be as coherent as the underlying rights it seeks to distribute. Where the law leaves ambiguous whether carbon inheres in the state, the landowner or the community, entitlement claims are correspondingly uncertain and enforceable distribution becomes structurally impossible. The framework must therefore clearly define ownership of the carbon asset and must extend meaningful legal protection to customary rights-holders who may lack formal title, but who are the primary stewards of the relevant ecosystems.

The second criterion is statutory specificity. It is not sufficient for primary legislation to acknowledge that benefits should be shared; it must prescribe the substantive content of that sharing with sufficient precision to create legally reliable expectations. This includes the basis upon which benefits are calculated, the minimum thresholds below which allocation cannot fall, and the categories of benefit financial and non-financial to which communities are entitled. A statute that defers these determinations entirely to subsidiary instruments, without articulating guiding principles in the parent Act, fails this standard because it substitutes regulatory discretion for legislative obligation.

The third criterion is enforceability. Rights without remedies are, in Hohfeld's classical formulation, not rights at all but mere liberties.[74] An adequate framework must equip

[74] Wesley Newcomb Hohfeld, 'Some Fundamental Legal Conceptions as Applied in Judicial Reasoning' (1913) 23 Yale Law Journal 16.

communities, landowners and other entitled parties with legally actionable claims, supported by accessible dispute resolution mechanisms and effective institutional oversight. Enforceability is the bridge between legal text and lived reality: it is what transforms statutory language into actual distributions of benefit.

The governance framework that underpins benefit-sharing is covered by the fourth criterion, transparency and accountability. The framework must create disclosure requirements mandating that impacted communities have access to revenue flows, allocation decisions, and expenditure records. Additionally, it must establish institutional accountability systems that can identify and discourage elite capture, misappropriation, and non-compliance, whether through judicial review, parliamentary oversight, or independent auditors.

The fifth requirement is participation, which should ensure that all stakeholders are sincerely, informed and previous involvement in the planning, negotiating, and oversight of benefit-sharing agreements rather than just consultation. This requirement draws prescriptive force from both the international principle of free, prior and informed consent and from Zambia's constitutional commitment to inclusive governance. Participation is, as the literature consistently demonstrates, both intrinsically valuable and instrumentally necessary. Frameworks designed without community input tend to misallocate benefits and generate the social conflict that ultimately undermines project viability.

The sixth and final criterion is constitutional alignment. Because Zambia's Constitution enshrines equitable resource use, sustainable development and the rule of law as foundational values, any legislative framework governing carbon benefit-sharing must be assessed not only on its technical design but on its fidelity to these constitutional commitments. A statutory scheme that is technically operational but distributively unjust or that delegates essential rights-determining functions to unaccountable executive discretion, is normatively deficient in a constitutional order that takes these values seriously. These criteria form the analytical spine of the study. They are not applied mechanically as a checklist but as an integrated set of standards that reflect the deeper demands of justice, legality and good governance that the law of benefit-sharing must meet.

2.10 Conclusion

This chapter has established the conceptual and theoretical foundations upon which the remainder of this study rests. Benefit-sharing in land-based carbon projects is best understood not as a discretionary benefit conferred by developers or the state upon communities, but as a legal entitlement grounded in principles of distributive justice, property rights and constitutional governance. The theoretical perspectives of Rawls, Okoth-Ogendo, Cotula and Boyd converge on a common insight: where the law fails to define entitlements with precision, power fills the vacuum that law leaves, invariably to the detriment of the least advantaged stakeholders. The principles of equity, legal certainty, transparency, participation and subsidiarity informed by international frameworks including the Paris Agreement, REDD+ safeguards and UNDRIP provide the normative standards against which any domestic benefit-sharing framework should be measured. Against this backdrop, the next chapter turns to examine how Zambia's current legal architecture addresses or fails to address these demands.

CHAPTER THREE: THE LEGAL FRAMEWORK GOVERNING BENEFIT-SHARING IN ZAMBIA

3.1 Introduction

Chapter Two laid down the conceptual and theoretical foundations against which any domestic benefit-sharing regime must be measured. The discussion identified six evaluative criteria clarity of carbon rights, statutory specificity, enforceability, transparency and accountability, participation and constitutional alignment that together translate the broad commitments of distributive justice, fiduciary stewardship and good environmental governance into legal standards capable of doctrinal application. The present chapter applies that analytical framework to the Zambian legal order. It examines, with the closeness of statutory interpretation, how the existing body of national legislation regulating carbon stock management and carbon trading addresses the question of who is entitled to the benefits flowing from land-based carbon projects, on what basis those benefits are allocated and through what mechanisms they are enforced.

The legal architecture under examination is, importantly, of recent vintage. The principal instrument is the Green Economy and Climate Change Act, 2024, which was assented to in 2024 and which represents the first comprehensive statutory framework addressing climate change governance in Zambia. The Act is supported by the Green Economy and Climate Change (Carbon Market) Regulations, 2026 (the "Carbon Market Regulations"), promulgated by the Minister under section 46 of the GECC Act and gazetted on 9 January 2026. Together with the Forests Act, 2015 and the Forests (Carbon Stock Management) Regulations of 2021 which retain residual application to forest-based carbon activities these instruments form the statutory landscape within which the benefit-sharing question must be answered.

The argument advanced in this chapter is that, while the legislative framework is on its face an ambitious and welcome development, it falls short of the evaluative standards distilled in Chapter Two. The Act vests the carbon resource in the President without articulating the derivative entitlements of communities and landowners. It contemplates a community development and benefit-sharing agreement but leaves the trigger of that obligation, its substantive content, the modalities of negotiation and the mechanics of enforcement to a regime of subsidiary instruments and discretionary administrative practice. The Carbon Market Regulations, although they introduce a tiered share-of-proceeds formula and a model agreement template, do not themselves cure the deeper structural deficits of the parent Act. The ensuing analysis demonstrates that the Zambian framework, as it now stands, secures neither the legal certainty that investors require nor the substantive entitlements that communities are doctrinally and constitutionally owed.

The chapter proceeds as follows. Section 3.2 maps the layered statutory architecture and locates the benefit-sharing provisions within it. Section 3.3 conducts a doctrinal analysis of the GECC Act, with particular emphasis on the vesting clause in section 22, the community development and benefit-sharing agreement under section 21(7) and (8), and the authorisation regime in section 24. Section 3.4 examines the residual role of the Forests Act and its 2021 carbon stock regulations and considers the problems of co-ordination created by the disjunction between these two statutory regimes. Section 3.5 turns to the Carbon Market Regulations, focusing on Part V and the Third Schedule. Section 3.6 then applies the six evaluative criteria from Chapter Two systematically to the framework as a whole. Section 3.7 synthesises the findings, and section 3.8 concludes.

3.2 The Statutory Architecture: A Layered Framework

The Zambian framework governing land-based carbon projects is not contained in a single instrument. It comprises a primary Act of Parliament, supporting subsidiary regulations, sector-specific legislation that retains independent force, and an overarching constitutional framework that supplies the relevant interpretive principles. A short cartography is therefore useful before the doctrinal evaluation begins.

The Constitution of Zambia, as amended by Act No 2 of 2016, supplies the supreme normative reference. Article 255 entrenches sustainable development and the equitable use of natural resources for the benefit of present and future generations, while Articles 1(3) and 9(2) enshrine participation and the supremacy of the Constitution.[75] Read together, these provisions establish a constitutional duty upon Parliament to translate equitable resource use into operational statutory rules a duty whose discharge is the central concern of this chapter.

At the statutory tier, the GECC Act is the principal instrument. Part V (sections 19 to 21) governs carbon stock management; Part VI (sections 22 to 28) regulates carbon markets; and Part IX establishes the Green Economy and Climate Change Fund.[76]Section 19, however,

[75] Constitution of Zambia (Amendment) Act, 2016, arts 1(3), 9(2) and 255.
[76] Green Economy and Climate Change Act, 2024 (Act No. 18 of 2024) (Zambia), Parts V, VI and IX.

expressly disapplies Part V to "carbon generated under the Forests Act, 2015", thereby preserving a parallel regime for forest-based carbon under the Forests Act (Act No 4 of 2015) and the Forests (Carbon Stock Management) Regulations, Statutory Instrument No 50 of 2021.[77] The Carbon Market Regulations, 2026 then operationalise Parts V and VI of the GECC Act for non-forestry carbon credit generation activities and for forest activities that do not fall within the carve-out in section 19.[78] The result is a layered, slightly overlapping architecture whose internal coherence is one of the issues addressed below.

3.3 The Green Economy and Climate Change Act, 2024

3.3.1 Section 22: Vesting of Carbon in the President

The doctrinal starting point for any analysis of benefit-sharing under the GECC Act is the vesting clause in section 22. The provision states:

"The ownership of carbon is vested in the President, on behalf of the Republic, until transferred or assigned under this Act or under any other written law."[79]

The vesting language follows a pattern familiar in Zambian natural-resource legislation, most notably the Lands Act and the Mines and Minerals Development Act, both of which vest the relevant resource in the President "on behalf of the people".[80] The doctrinal effect of such a clause is to constitute the state as a public trustee, holding the resource not in its own beneficial right but for the benefit of the citizenry. As Okoth-Ogendo observed in his classical study of African agrarian law, however, vesting clauses of this kind are doctrinally fragile where the legislature fails to articulate the fiduciary duties that accompany the trusteeship.[81] In the absence of statutory specification of how the trust is to be discharged, the President's vesting tends in practice to operate as a sovereign assertion of power rather than as a juridical relation generative of enforceable rights in the supposed beneficiaries.

Three difficulties flow from section 22. First, the Act nowhere defines who, downstream of the President, may acquire derivative entitlements to the carbon resource and on what basis. The closing words of section 22 "until transferred or assigned under this Act or under any other written law" anticipate that derivative interests may arise but supply no statutory criteria by

[77] GECC Act, s 19.
[78] GECC Act, s 19 (disapplying Part V to carbon generated under the Forests Act, 2015).
[79] GECC Act, s 22.
[80] Lands Act, Cap 184, s 3; Mines and Minerals Development Act, 2015 (Act No. 11 of 2015), s 3.
[81] HWO Okoth-Ogendo, Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya (ACTS Press 1991) 6–9.

which such transfers or assignments are to be effected. Second, the relationship between the carbon vested in the President and the surface estate held under the Lands Act is not addressed. A person holding land under leasehold or under recognised customary tenure is left to infer, as a matter of construction, whether and to what extent her rights extend to the carbon stored in trees and soils on that land. Third, the Act offers no guidance on the position of communities holding land under customary tenure who function as the de facto stewards of the very forests that generate the carbon asset. The omission is significant because, as Cotula has shown in his comparative study of carbon and biodiversity contracts, the legal silence on entitlements is the principal mechanism through which communities are systematically displaced from the carbon value chain.[82]

Section 22 therefore creates a vesting without a corresponding articulation of derivative rights. By the standards developed in Chapter Two, and in particular the criterion of clarity of carbon rights this is a deficient legislative design.

3.3.2 Section 21(7) and (8): The Community Development and Benefit-Sharing Agreement

The Act addresses benefit-sharing most directly in section 21(7), which provides:

"*A project developer shall prior to implementing a project approved under this section, where applicable, sign a community development and benefit sharing agreement with the beneficiaries where operations are to be carried out in a prescribed manner.*"[83]

Subsection (8) adds that "[t]he community development and benefit sharing agreement referred to under subsection (7) shall contain particulars as prescribed."[84]

Two textual features of section 21(7) deserve careful scrutiny. The first is the qualifier "where applicable". The Act does not specify the conditions in which the obligation to conclude an agreement is triggered. The provision is silent on whether applicability turns upon the size of the project, the number of households affected, the location of the project on customary as opposed to state land, the type of activity being undertaken or some other criterion altogether. The result is that the obligation is conditional upon a determination whose criteria are

[82] L Cotula and J Mayers, Tenure in REDD+: Start-Point or Afterthought? (International Institute for Environment and Development 2009) 14–18.
[83] GECC Act, s 21(7).
[84] GECC Act, s 21(8).

themselves undefined. From a rule-of-law perspective, this creates a classic species of administrative discretion that the principle of legality requires Parliament to constrain.[85]

The second textual feature is the cross-reference to "particulars as prescribed". Subsection 8 defers the substantive content of the agreement entirely to regulations or guidelines made under section 45 or 46 of the Act. The Act itself contains no statement of the matters that the agreement must cover, no specification of the proportion of revenues to be allocated to communities and no minimum standards for non-financial benefits such as employment, capacity-building or infrastructure. In its statutory form, therefore, section 21(7) is in substance a placeholder: it acknowledges the existence of a benefit-sharing question but transfers the answer to executive instruments.

The difficulty with this design has long been recognised in administrative law scholarship. Where primary legislation defers to subordinate instruments the determination of essential elements of rights and obligations, Parliament is properly understood to have abdicated its legislative function in favour of the executive.[86] In the carbon governance context, the deferral is particularly significant because the affected interests, those of communities whose customary livelihoods may be curtailed by land-use restrictions are precisely the interests for whose protection legislative attention is most needed.

3.3.3 Section 24(5): Benefit-Sharing as a Consideration in Authorisation

A further engagement with benefit-sharing appears in section 24(5)(c), which directs the Director, when considering an application for a certificate of authorisation to trade in carbon credits, to "have regard to" inter alia "participation and benefit sharing in the profits arising from carbon trading with local communities”. The phrasing is significant; the Director is required to "have regard to" benefit-sharing rather than to ensure or enforce it. The provision casts the question as a discretionary consideration to be weighed by the regulator, not as a pre-condition of authorisation. The textual difference between "have regard to" and a mandatory verb formulation has been the subject of extensive jurisprudence in the common-law world, with the consistent conclusion that a "have regard to" standard imposes a duty of consideration only and not a duty of compliance.[87]

[85] HWR Wade and CF Forsyth, Administrative Law (11th edn, Oxford University Press 2014) 304–07.
[86] Carbon Market Regulations (n 2) reg 6 (concept note) and First Schedule, Form I.
[87] T Dev, 'Regulatory Interventions by Governments in Africa' in Carbon Markets in Africa: An Overview (Centre for Science and Environment 2024) https://www.jstor.org/stable/resrep63281.9 accessed 13 December 2025.

The architecture of section 24(5) confirms this reading. The provision lists five matters of which the Director must "have regard": environmental integrity, avoidance of double counting, participation and benefit sharing, additionality and the promotion of sustainable development. None of these is configured as a mandatory threshold whose absence would defeat the application. The Director may, in principle, issue a certificate of authorisation notwithstanding inadequate benefit-sharing arrangements, provided the matter has been considered.

3.4 The Forests Act, 2015 and the Forests (Carbon Stock Management) Regulations, 2021

The interaction between the GECC Act and the Forests Act, 2015 is governed by Section 19 of the GECC Act, which provides that Part V "shall not apply to carbon generated under the Forests Act, 2015". The effect is that forest-based carbon, where it is generated under a permit issued under the Forests Act, falls outside the carbon stock management regime of the GECC Act and is governed instead by the Forests Act and its Statutory Instrument 66 of 2021 (the Forests (Carbon Stock Management) Regulations).

The Forests Act provides for the issuance of carbon stock management permits and authorises the Minister to prescribe the manner of allocation of benefits arising from carbon trading. Statutory Instrument 66 of 2021 elaborates on the permitting regime, the duties of permit holders and the framework for the sharing of carbon revenues with affected communities and, in the case of community forests and customary lands, with traditional leadership.

Two tensions arise from this bifurcated architecture. The first is duplication. Forest-based carbon projects that are also brought within the cooperative approaches of the Paris Agreement under Part VI of the GECC Act are required, on a strict reading of the statutes, to comply with both regimes. The Carbon Market Regulations contemplate that forest activities seeking corresponding adjustment under Article 6 of the Paris Agreement migrate from the voluntary regime into the GECC framework, but the procedural mechanics of that migration, and in particular the treatment of pre-existing benefit-sharing arrangements concluded under the Forests Act, are imperfectly addressed.[88] The second tension is potential conflict. The Forests Act vests forest produce in the President but recognises customary rights of users in customary forests, while the GECC Act vests carbon in the President without such recognition.[89] The

[88] Carbon Market Regulations, reg 21.
[89] Forests Act s 3 (vesting of forest produce in the President).

relationship between forest produce, which arguably encompasses the carbon stored in trees, and carbon as a separate legal asset is not statutorily clarified.

For benefit-sharing, the practical consequence of this disjunction is that affected communities are required to navigate a multi-layered permitting and contracting environment in which different statutes prescribe different rules, different ministries operate different registries and different default templates govern community agreements. The Carbon Market Regulations attempt to draw the strands together through a unified concept note process, but the underlying statutory bifurcation persists.[90]This poses a co-ordination problem that the framework does not satisfactorily resolve.

3.5 The Green Economy and Climate Change (Carbon Market) Regulations, 2026

3.5.1 Architecture and Scope

The Carbon Market Regulations were issued by the Minister of Green Economy and Environment in exercise of the regulation-making power under Section 46 of the GECC Act. The Regulations are organised in six parts and three schedules. Of central importance for the present study is Part V, headed "Share of Proceeds and Community Development and Benefit Sharing", which contains Regulations 20, 21 and 22.

Regulation 20 limits the application of Part V. The provisions on share of proceeds and benefit-sharing do not apply to carbon credits generated by activities implemented under the supervision of a mechanism established under the Paris Agreement and not requesting for a corresponding adjustment.[91]The carve-out, which appears designed to align with Article 6.4 of the Paris Agreement, has the effect that voluntary carbon market activities that elect not to seek corresponding adjustment escape the statutory share-of-proceeds and benefit-sharing regime altogether. Given that the bulk of historic and contemporary land-based carbon project activity in Zambia has occurred under voluntary standards such as Verra and Gold Standard,[92] the practical reach of Part V may be considerably narrower than its drafting suggests.

[90]GECC Act, s 34(3)(c) (the Fund consists of monies that may be levied from carbon credit transactions).
[91] Carbon Market Regulations, reg 22.
[92] T Dev, 'Regulatory Interventions by Governments in Africa' in Carbon Markets in Africa: An Overview (Centre for Science and Environment 2024) https://www.jstor.org/stable/resrep63281.9 accessed 13 December 2025.

3.5.2 Regulation 21 and the Third Schedule: The Tiered Share of Proceeds

Regulation 21 requires "[a] holder of a certificate of authorisation, or an acquiring party, relating to a carbon generation activity requesting for a corresponding adjustment" to pay a share of proceeds as set out in the Third Schedule.[93] The Third Schedule sets out a tiered formula expressed as a payment per mitigation outcome:

US$1.00 per mitigation outcome for the first 1 to 50,000 mitigation outcomes;

US$1.50 per mitigation outcome for the next 50,001 to 100,000; and

US$2.00 per mitigation outcome for the next 100,001 and above.

Three observations may be made. First, the formula is volume-based rather than ad valorem. The share of proceeds is calculated by reference to the number of mitigation outcomes rather than the price at which they trade. In a market in which carbon prices vary widely between voluntary and compliance segments, between project types and across vintages, a volume-based formula imposes a regressive burden on low-priced credits and a permissive one on high-priced credits.[94] Second, the formula is silent on the destination of the proceeds. The Schedule prescribes the amount payable but not the fund or account into which the payments are made, nor the mechanism by which any portion of those proceeds is to be channelled to communities. Read alongside Section 34 of the GECC Act, which establishes the Green Economy and Climate Change Fund, the inference is that the share of proceeds accrues to the Fund but the Regulations themselves do not say so, and the relationship between the share of proceeds and the community benefit-sharing agreement under Regulation 22 is left to administrative inference.[95] Third, the share of proceeds is described as a payment from the developer or the acquiring party, not as a benefit-sharing allocation to all stakeholders involved . It is, in legal substance, a sovereign levy on transfers rather than a community entitlement.

3.5.3 Regulation 22: The Community Development and Benefit-Sharing Agreement

Regulation 22 provides:

[93] Carbon Market Regulations, reg 21.
[94] C Streck and J Lin, 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) 19(2) European Journal of International Law 409, 425–28.
[95] GECC Act, s 34(3)(c) (the Fund consists of monies that may be levied from carbon credit transactions).

"(1) A carbon credit generation activity in which an individual or a community directly participate in the facilitation of the generation of emissions shall be subject to benefit sharing in accordance with the community development and benefit sharing agreement.

(2) The community development and benefit sharing agreement referred to under subregulation (1) shall be agreed and signed by an individual or community directly participating in the facilitation of the generation of emissions, the project developer and the Government."[96]

Regulation 22 is more prescriptive than its parent provision in section 21(7) of the Act, but it is still in important respects underdetermined. The trigger of the obligation, "directly participate in the facilitation of the generation of emissions" is a phrase that admits of significant interpretive latitude. Whether a community whose customary activities are restricted by a project, but which does not actively perform tree-planting, monitoring or fire management duties, is "directly participating" within the meaning of the Regulation is unclear. The phrase risks confining benefit-sharing to a narrow class of community-led projects and excluding the more common case in which communities are passive bearers of project costs.[97]

The Regulation is also silent on the substantive content of the agreement. Form II in the First Schedule contains a template that requires the agreement to specify the project description, identification of stakeholders and beneficiaries, types of benefits, benefit allocation criteria, distribution mechanisms and a "Proposed Benefit Sharing Factor".[98] The template is a useful procedural device, but it does not specify the minimum proportion of revenues that must accrue to communities, the formula by which the Benefit Sharing Factor is to be calculated or the floor below which the agreement cannot validly fall. The result is that the Regulation prescribes the form of the agreement without prescribing its substance, a familiar deficit in benefit-sharing instruments across the region.[99]

3.5.4 Reporting and Verification

The Regulations integrate community benefit-sharing into the verification regime by requiring monitoring reports and verification statements to indicate "where applicable, how the

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[96] Carbon Market Regulations, reg 22.
[97] This concern echoes the empirical findings reported in C Luttrell, L Loft, MF Gebara, D Kweka, M Brockhaus, A Angelsen and WD Sunderlin, 'Who Should Benefit from REDD+? Rationales and Realities' (2013) 18(4) Ecology and Society 52.
[98] Carbon Market Regulations, First Schedule, Form II (Community Development and Benefit Sharing Agreement).
[99] Mathew Bukhi Mabele, 'Learning from the Other: Benefit-Sharing Lessons for REDD+ Implementation Based on CBFM Experience in Northern Tanzania' (2020) 97 Land Use Policy 104222.

community development and benefit sharing agreement is being implemented".[100] The implementation of the agreement is therefore observable through the monitoring framework. However, neither the Regulations nor the parent Act specify the consequences of non-implementation. The compliance order regime under Regulation 28 and Section 33 of the Act may, in principle, be invoked where a project developer breaches a condition of authorisation, but the linkage between benefit-sharing non-performance and the compliance order pathway is implicit rather than express. In practice, this means that the principal sanction for breach of a community development and benefit-sharing agreement is contractual rather than regulatory: the community must, in the absence of any administrative pathway, sue on the agreement itself. As discussed at section 3.3.4 above, the resulting forum problem is acute.

3.6 Application of the Evaluative Criteria

Having examined the principal statutory provisions, the analysis now applies the six criteria distilled in Chapter Two.

3.6.1 Clarity of Carbon Rights

The criterion of clarity demands that the legal framework define unambiguously who owns the carbon asset and what rights flow from that ownership. Section 22 of the GECC Act vests carbon in the President but neither identifies the derivative beneficiaries of that vesting nor articulates the relationship between the carbon and the underlying surface estate. Communities holding land under customary tenure are not mentioned in the Act, and their position relative to the carbon resource is left to inference. Streck has argued that the legislative anchor of any credible benefit-sharing regime is a clearly drafted carbon rights provision; on that test, the Zambian framework fails.[101] Recent comparative assessment confirms that the absence of clear statutory recognition of community carbon rights remains widespread across tropical-forest jurisdictions, Zambia among them.[102]

3.6.2 Statutory Specificity

The criterion of statutory specificity requires the parent Act to articulate, with sufficient precision, the substantive content of the benefit-sharing obligation. The GECC Act does not. Section 21(7) defers the content of the agreement to "particulars as prescribed", and although

[100] Carbon Market Regulations, regs 10(4)(b)(iv) and 11(1)(f).
[101] C Streck, 'Who Owns REDD+? Carbon Rights, Carbon Accounting and the Future of Land-Based Climate Action' (2020) 11(6) Carbon Management 339, 343-46.
[102] R Lyster, Climate Justice and Disaster Law (Cambridge University Press 2015) 198–202.

Regulation 22 of the Carbon Market Regulations operationalises the obligation through Form II, the Regulation does not prescribe a minimum community share, a formula for calculating the Benefit Sharing Factor or the minimum non-financial benefits to which communities are entitled. The legislative design is consonant with what Boyd described as the deferral pathology of carbon governance: the substantive content of distributive rules is repeatedly displaced from the political branch into the contractual sphere, where it is determined by the parties' relative bargaining strength.[103]

3.6.3 Enforceability

Enforceability presupposes not merely that an obligation exists but that the right-holder has access to a forum in which the obligation may be vindicated. The framework provides three potential pathways: arbitration under section 28 of the GECC Act, the compliance order regime under section 33 and Regulation 28, and ordinary contractual proceedings on the community development and benefit-sharing agreement. None of these is well calibrated to the realities of rural and customary communities. Arbitration is procedurally formal and financially costly; compliance orders are issued at the discretion of the Director and only where authorisation conditions are breached; contractual proceedings require the affected community to retain counsel and bear the cost of litigation. As Hohfeld observed, a right without a remedy is, in legal terms, no right at all.[104] The framework's enforceability deficit is therefore not merely a question of forum but a question of effective access to justice.

3.6.4 Transparency and Accountability

The Regulations do introduce certain transparency-supporting features. The National Carbon Registry, established under Regulation 27, is required to contain data on all carbon credit generation activities in the Republic. Verification statements must indicate, where applicable, how the community development and benefit-sharing agreement is being implemented.[105] Yet the framework does not require that community benefit-sharing agreements themselves be publicly disclosed, that revenue flows to communities be published, or that aggregate share-of-proceeds collections be reported in a manner accessible to citizens. Independent oversight is also limited: while the Auditor-General audits the Green Economy and Climate Change Fund

[103] W Boyd, 'Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance' (2010) 37 Ecology Law Quarterly 843, 887–89.
[104] WN Hohfeld, 'Some Fundamental Legal Conceptions as Applied in Judicial Reasoning' (1913) 23 Yale Law Journal 16,
[105]For discussion of legitimate expectation in Zambian administrative law, see, generally, Wade and Forsyth (n 14) 446–49 (in the comparative common-law context).

under section 36 of the Act, there is no equivalent independent oversight of community benefit-sharing arrangements at project level. The literature is consistent that transparency without disclosure is, in benefit-sharing contexts, a procedural placebo.[106]

3.6.5 Participation

The framework's treatment of participation is uneven. On the one hand, Regulation 8(1)(e) requires project developers to "conduct comprehensive stakeholder consultations" as part of the project proposal, and Regulation 22(2) requires the agreement to be signed by the community as well as the developer and the Government. On the other hand, the Act and Regulations do not provide for free, prior and informed consent in the form contemplated by the United Nations Declaration on the Rights of Indigenous Peoples or the Cancun Safeguards.[107] Consultation is required; consent is not. Consultation entails the duty to listen; consent entails the right to refuse. In the carbon governance context, where land-use restrictions may significantly curtail customary livelihoods, a consultation-only model risks reducing community participation to a procedural formality detached from substantive control over project terms. Lyster's earlier observation that participation must be coupled with substantive entitlements if it is to be more than performative finds direct application here.[108]

3.6.6 Constitutional Alignment

The final criterion turns on whether the framework gives effect to the constitutional values discussed in Chapter Two. Article 255 of the Constitution requires that natural resources be used equitably for the benefit of present and future generations.[109] On the analysis above, the GECC Act delegates the determination of equitable benefit-sharing to subsidiary instruments without articulating the principles by which that determination is to be made. The constitutional principle of legality requires that essential matters of rights be regulated by Parliament itself,[110] and benefit-sharing in the carbon context given its proximity to property, livelihood and community rights, falls comfortably within the category of essential matters. The doctrine of

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[106] Ivan Bond, Muyeye Chambwera, Brian Jones, Monica Chundama and Isilda Nhantumbo, REDD+ in Dryland Forests: Issues and Prospects for Pro-Poor REDD in the Miombo Woodlands of Southern Africa (IIED 2010).
[107] United Nations Declaration on the Rights of Indigenous Peoples, UNGA Res 61/295 (13 September 2007), arts 19 and 32; UNFCCC, 'The Cancun Agreements' Decision 1/CP.16 (2010), Appendix I, paras 2(c) and 2(d).

[108] R Lyster, Climate Justice and Disaster Law (Cambridge University Press 2015) 198–202.
[109] Constitution of Zambia (Amendment) Act, 2016, art 255.

[110]K Muigua, 'Realizing Equitable Benefit Sharing in Kenya' (2023) https://kmco.co.ke/wp-content/uploads/2023/08/Realizing-Equitable-Benefit-Sharing-in-Kenya.pdf accessed 12 May 2026

legitimate expectation, to which the Zambian courts have on occasion had recourse,[111] is also implicated: communities have, over the course of a decade of REDD+ piloting, acquired expectations about benefit allocation that the new framework neither honours nor expressly displaces. The doctrinal gap between the Act and the constitutional values that animate Article 255 is, on the present analysis, real and material.

3.7 Synthesis: Adequacy and Certainty Assessment

Drawing the strands together, the framework presents an asymmetric profile. It performs reasonably on the establishment of an institutional architecture: the Department of Green Economy and Climate Change, the Technical Committee, the Director, the Zambia Environmental Management Agency and the National Carbon Registry are all clearly designated, with reasonably clear mandates.[112] It performs reasonably on procedure: concept notes, project proposals, validation reports, verification statements and monitoring reports are required at defined points in the project life cycle. It performs poorly, however, on substance. The carbon rights question is resolved only by a sovereign vesting that does not articulate downstream entitlements; the benefit-sharing question is resolved only by a regulation-deferred template that does not specify minimum allocations; the enforceability question is resolved only by a default arbitration regime that is effectively inaccessible to most rural communities. The framework, in short, codifies the architecture of carbon trading without codifying the architecture of carbon justice.

The implications of this asymmetry are practical as well as doctrinal. From the developer perspective, the framework imposes administrative costs without delivering legal certainty about community entitlements, with the consequence that project risk premia remain elevated and bankability is undermined. From the community perspective, the framework promises benefit-sharing but defers its substance to negotiations in which the community is, in informational and legal terms, the structurally weaker party. From the state perspective, the framework collects a sovereign share of proceeds but does so under a volume-based formula that does not capture rents in a high-price market and does not protect revenues in a low-price

[111]Climate Change Act (Cap 387A) (Kenya) s 23E(5)(b)(i), as amended; Climate Change (Carbon Markets) Regulations 2024, LN 84 (Kenya) reg 29(1)(a) and (b). For the doctrinal commentary, see also Muigua (n 3)

[112] GECC Act, ss 4–9 (Department, Director, Council and Technical Committee); Carbon Market Regulations, reg 27 (National Carbon Registry).

market.[113] The cumulative effect is a regime that is ostensibly comprehensive but is substantively under-specified.

It must be emphasised, in fairness to the legislature, that the GECC Act and the Carbon Market Regulations are recent instruments that operate in a still-emergent area of practice. Some of the deficits identified above may, in the fullness of time, be cured by guidelines issued under Section 45 of the Act, by jurisprudence developed under Section 28 disputes or by amendments to the Carbon Market Regulations. The doctrinal deficits, however, are unlikely to be cured by guidelines or jurisprudence alone; they are deficits at the level of primary legislation and require legislative correction. That conclusion provides the springboard for the comparative analysis in Chapter Four.

3.8 Conclusion

This chapter has examined the Zambian legal framework governing benefit-sharing in land-based carbon projects against the six evaluative criteria distilled from Chapter Two. The principal finding is that the framework, while procedurally elaborate, is doctrinally thin. The vesting clause in Section 22 establishes carbon as a public asset without articulating derivative entitlements; Section 21(7) creates a community development and benefit-sharing obligation without specifying its trigger or content; Section 24(5) imposes only a duty to "have regard to" benefit-sharing in authorisation decisions; section 28 routes disputes into a forum ill-suited to community claimants; and the Carbon Market Regulations, although they introduce a tiered share-of-proceeds formula and a model agreement template, do not prescribe minimum community allocations or independent oversight mechanisms. Across the criteria of carbon rights clarity, statutory specificity, enforceability, transparency, participation and constitutional alignment, the framework displays a consistent pattern of legislative under-specification. The next chapter examines how comparable jurisdictions in Africa and beyond have addressed the same deficits, with a view to extracting principles capable of guiding Zambia's reform pathway.

[113] See Chapter Three, section 3.5.2 of this thesis on the volume-based formula in the Third Schedule to the Green Economy and Climate Change (Carbon Market) Regulations, 2026 (Statutory Instrument No 5 of 2026) (Zambia).

CHAPTER FOUR: COMPARATIVE LESSONS FROM SELECTED JURISDICTIONS

4.1 Introduction

Chapter Three found Zambia's framework procedurally elaborate but doctrinally thin: carbon is vested in the President without articulating downstream entitlements; the community development and benefit-sharing agreement under section 21(7) of the Green Economy and Climate Change Act, 2024 is triggered by an undefined applicability test and emptied of substantive content; the Carbon Market Regulations, 2026 introduce a tiered share of proceeds and a model template but prescribe no minimum community allocation; and enforcement rests on arbitration and ordinary contractual proceedings that are inaccessible to rural communities. The diagnostic question that follows is whether other jurisdictions, facing comparable demands of distributive justice and market credibility, have developed legislative responses from which Zambia might learn.

The present chapter takes up that question. It examines two African jurisdictions, Kenya and Tanzania, that have moved earlier or more comprehensively than Zambia to codify benefit-sharing rules for land-based carbon projects. Each jurisdiction presents a distinct legislative posture: Kenya has embraced statutory ratios that prescribe minimum community allocations; Tanzania has imposed mandatory benefit-sharing plans through subsidiary legislation while exposing the limits of weak enforcement design. The chapter does not propose wholesale legal transplantation, an exercise that comparative scholarship has long shown to be doctrinally inadvisable. Its purpose is more modest and more principled: to draw from each jurisdiction the legislative techniques and design choices that are responsive to the deficits identified in Chapter Three, and to assemble from those techniques a coherent set of reform principles for Zambia.

The argument advanced in this chapter is that the doctrinal weaknesses in the Zambian framework, the ambiguity of carbon rights, the absence of statutory minimum allocations, the dependence on contractual remedies, and the marginal role accorded to community participation, are not inherent features of carbon market legislation. They are legislative choices, and they are choices that comparable African states have, with varying degrees of success, declined to make. The discussion is arranged as follows. Section 4.1 explains the rationale and method of the comparative inquiry. Sections 4.2 and 4.3 examine the Kenyan and Tanzanian frameworks in turn, in each case mapping the relevant instruments before applying the evaluative criteria developed in Chapter Two. Section 4.4 distils the principles capable of guiding Zambia's reform pathway, and section 4.5 concludes.

4.2 Kenya: Statutory Codification of Benefit-Sharing Ratios

4.2.1 Statutory architecture

Kenya's carbon governance framework rests upon the Climate Change Act, 2016 as amended by the Climate Change (Amendment) Act, 2023, which introduced a dedicated Part on carbon markets and explicitly recognised the right of communities and landowners to participate in and benefit from carbon trading activities.[114] The 2023 amendment is significant because it elevates benefit-sharing from a matter of subsidiary instrument to a matter of primary legislation. The carbon market provisions in the amended Act are operationalised by the Climate Change (Carbon Markets) Regulations, 2024, which prescribe registration, validation and verification requirements and lay out the share-of-proceeds and community benefit-sharing framework in considerable detail.[115]

The amended Act and the 2024 Regulations together establish what may be called a tripartite structure. At the apex sits the Designated National Authority, which authorises carbon projects and approves benefit-sharing arrangements. Beneath it sits the project proponent, who must conclude a Community Development Agreement with the affected community as a precondition of authorisation. At the base sit the community institutions, recognised in the legislation as the legal counterparties to the agreement, who hold an enforceable statutory entitlement to a defined share of the gross earnings from the project.[116] Critically, the Kenyan framework does not consign these arrangements to private contract. The Community Development Agreement is a statutory creature whose minimum content is prescribed by the Regulations and whose breach exposes the proponent to both administrative and contractual remedies.

4.2.2 Carbon rights and the underlying tenure architecture

A distinguishing feature of the Kenyan framework is its express engagement with the relationship between carbon rights and underlying land tenure. The amended Climate Change

[114] Climate Change Act (Cap 387A) (Kenya) as amended by the Climate Change (Amendment) Act 2023 (Act No 9 of 2023) (Kenya).
[115] Climate Change (Carbon Markets) Regulations 2024, LN 84 (Kenya).
[116] https://www.jstor.org/stable/resrep63281.9 K Muigua, 'Realizing Equitable Benefit Sharing in Kenya' (2023) https://kmco.co.ke/wp-content/uploads/2023/08/Realizing-Equitable-Benefit-Sharing-in-Kenya.pdf accessed 12 May 2026

Act does not vest carbon in the President or the Republic in the unqualified manner of Zambia's section 22. Rather than establishing a rival sovereign vesting, the Act adopts a functional approach: by requiring that every land-based project be implemented through a Community Development Agreement and by mandating a minimum annual social contribution to the community, the legislation attaches enforceable distributive obligations to the project relationship, anchoring them in the pre-existing land tenure architecture without needing to resolve the anterior question of who holds the carbon asset.[117] This recognition is significant as it supplies the legal foundation upon which the benefit-sharing ratios subsequently rest: communities are not the discretionary beneficiaries of a sovereign grant; they are the holders of an entitlement that flows from the underlying tenure architecture and that the carbon market regime is designed to operationalise rather than to displace.

The implications for customary tenure are equally noteworthy. Kenyan community land is governed by the Community Land Act, 2016, which recognises registered communities as legal persons capable of holding and dealing with community land, including the natural resources within it.[118] The carbon market framework attaches to this pre-existing tenure architecture rather than supplanting it. Customary communities thus enter the carbon market as legal rights-holders rather than as administrative beneficiaries, an alignment that the Zambian framework conspicuously lacks.

4.2.3 The statutory benefit-sharing ratio

The most substantively important feature of the Kenyan framework is the explicit statutory minimum for the community's share of project revenues. Section 23E(5)(b) of the Climate Change Act, as amended by the Climate Change (Amendment) Act 2023, provides that every Community Development Agreement must include an annual social contribution calculated on the aggregate earnings of the previous year, and that in land-based projects this contribution must be at least forty per centum of those aggregate earnings, while in non-land-based projects it must be at least twenty-five per centum. These minima are operationalised and confirmed by regulation 29(1)(a) and (b) of the Climate Change (Carbon Markets) Regulations 2024, which specify that both percentages are calculated on the aggregate earnings of the previous year less cost of doing business. The minimum community share for land-based projects is therefore

[117] Environmental Management Act 2004 (Cap 191) (Tanzania); Environmental Management (Control and Management of Carbon Trading) Regulations 2022, GN No 636 (Tanzania).
[118] https://www.sciencedirect.com/science/article/abs/pii/S0264837717301059 Community Land Act 2016 (Act No 27 of 2016) (Kenya).

forty per centum of the aggregate earnings less cost of doing business, with the balance divided between the proponent's margin and government levies, including the Climate Change Fund under regulation 30 (a) of the 2024 Regulations. The ratio is expressed as a floor rather than a ceiling: project proponents may agree to higher community shares, but they may not contract below the statutory minimum.

Three design features of the Kenyan ratio merit attention. First, the ratio is earnings-referenced rather than volume-based: it is calculated by reference to the aggregate earnings of the project (less cost of doing business under regulation 29(1)(a)) rather than by reference to the number of credits issued. This ensures that the community share tracks the underlying commercial value of the project, addressing the regressive effect of the volume-based per-unit formula employed in the Third Schedule to the Zambian Carbon Market Regulations 2026.[119] Second, the ratio is expressed in the parent Act itself, section 23E(5)(b)(i) of the Climate Change Act and confirmed in the subsidiary Regulations, with the consequence that it cannot be displaced by unequal bargaining at the project level and any contractual provision purporting to reduce the community's share below forty per centum would be void. Third, the ratio is accompanied by a procedural infrastructure for its operationalisation, including community development funds, mandatory benefit-sharing plans and reporting obligations that render the ratio visible and auditable.

Muigua, writing in the African doctrinal literature, has commended this design as exemplifying good legislative practice in carbon governance, while cautioning that codified ratios are productive only where they sit upon clearly defined ownership provisions.[120] That qualification is significant for present purposes. It is not the ratio in isolation, but the ratio resting upon the recognition of communal carbon entitlement, that gives the Kenyan framework its distributive force.

4.2.4 Application of the evaluative criteria

Tested against the criteria developed in Chapter Two, the Kenyan framework performs strongly on clarity of carbon rights, statutory specificity and constitutional alignment. The recognition of community and landowner entitlements addresses the first criterion; the explicit ratio

[119] See Chapter Three, section 3.5.2 of this thesis on the volume-based formula in the Third Schedule to the Green Economy and Climate Change (Carbon Market) Regulations, 2026 (Statutory Instrument No 5 of 2026) (Zambia).
[120] Climate Change Act (Cap 387A) (Kenya) s 23E(5)(b)(i), as amended by Climate Change (Amendment) Act 2023 (Act No 9 of 2023) (Kenya); Climate Change (Carbon Markets) Regulations 2024, LN 84 (Kenya) reg 29(1)(a).

addresses the second; and the integration of the framework with the constitutional principle of equitable benefit-sharing under Article 69 of the Kenyan Constitution addresses the sixth.[121] Performance on enforceability is more qualified. Although the Regulations create a statutory benefit-sharing entitlement, communities seeking to vindicate that entitlement must still navigate administrative processes and, ultimately, ordinary civil proceedings, and the literature has flagged practical difficulties in early implementation, particularly around the verification of payment.[122] Transparency and accountability are advanced by reporting obligations and by the requirement to disclose community development plans; participation is operationalised through the Community Development Agreement and through community land institutions. Notably, regulation 16(l) of the Climate Change (Carbon Markets) Regulations 2024 requires the provision of documentation of free, prior and informed consent for all community land-based carbon projects, a strengthening of participatory requirements at the subsidiary legislation level, though whether documentation of consent will be enforced as a substantive process right or as a procedural formality remains to be seen in practice.

The principal lesson for Zambia is therefore not that the Kenyan ratio should be imported wholesale, but that the legislative technique of expressing benefit-sharing as a statutory floor anchored in clearly defined carbon entitlements is both achievable and productive. The Zambian framework currently lacks both elements; the Kenyan framework supplies a model for how each can be incorporated.

4.3 Tanzania: Mandatory Plans and the Limits of Enforcement Design

4.3.1 Statutory architecture

The Tanzanian framework is centred upon the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022, made under the Environmental Management Act, 2004. The Regulations govern operation of the regime.[123] The Regulations require that any person intending to engage in carbon trading activities obtain a carbon trading permit from the National Carbon Monitoring Centre, and they make the conclusion of a benefit-sharing arrangement with affected communities and other stakeholders a condition of permit

[121] Constitution of Kenya 2010, art 69(1)(a).
[122] Environmental Management (Control and Management of Carbon Trading) Regulations 2022, GN No 636 (Tanzania) reg 34(3) and (4); see also Mabele (n 12).
[123] Environmental Management Act 2004 (Cap 191) (Tanzania); Environmental Management (Control and Management of Carbon Trading) Regulations 2022, GN No 636 (Tanzania).

issuance.[124] The instrument is supported by Guidelines for Carbon Trading and by sectoral arrangements covering forest, wildlife and other land-based activities.

Three structural features of the Tanzanian framework are noteworthy. First, the regime imposes mandatory benefit-sharing as an operational condition of market participation, not as an optional or "where applicable" obligation. Second, the regime requires that benefit-sharing plans be approved by the relevant authority rather than left to private negotiation. Third, the regime extends benefit-sharing to a wider set of stakeholders, including landowners, village governments and adjacent communities, reflecting Tanzania's strong tradition of decentralised resource governance under the Village Land Act, 1999.[125]

4.3.2 Carbon rights and the role of village governance

The Tanzanian framework occupies an intermediate position on the question of carbon rights. The Regulations do not contain an unqualified vesting clause analogous to section 22 of the GECC Act; nor do they recognise carbon entitlement in the manner of the Kenyan amendment. Rather, the framework operates through the existing tenure and land-use architecture, in which village land is administered by village councils acting under the Village Land Act and the Local Government (District Authorities) Act.[126] Village councils therefore function as the statutory counterparties for community benefit-sharing arrangements concerning village land. This institutional alignment is productive in the sense that it provides a pre-existing legal personality through which community entitlements may be asserted, avoiding the legal vacuum that customary communities sometimes encounter in jurisdictions where their legal status is unclarified.[127]

4.3.3 The benefit-sharing mechanism

The Tanzanian Regulations establish a substantive statutory framework for the distribution of carbon revenues. Regulation 34(3) of the Environmental Management (Control and Management of Carbon Trading) Regulations 2022 prescribes specific revenue shares for land-based projects: the Managing Authority is entitled to sixty-one per centum of the gross revenues

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[124]https://www.researchgate.net/publication/307359237_Promising_Change_Delivering_Continuity_REDD_as_Conservation_Fad Jacob and D Brockington, 'Learning from the Other: Benefit Sharing Lessons for REDD+ Implementation Based on CBFM Experience in Northern Tanzania' (2020) 97 Land Use Policy https://www.sciencedirect.com/science/article/abs/pii/S0264837717301059 Accessed on 12 may 2026

[125] Village Land Act 1999 (Act No 5 of 1999) (Tanzania).

[126] T Dev, 'Regulatory Interventions by Governments in Africa' in Carbon Markets in Africa: An Overview (Centre for Science and Environment 2024) https://www.jstor.org/stable/resrep63281.9 accessed 13 December 2025.

[127] Environmental Protection Act 2025 (Act 1124) (Ghana) s 150.

accrued from the sale of Certified Emission Reductions. Of that sixty-one per centum, where the Managing Authority operates under the council, ten per centum is remitted to the council for conservation activities and the remaining fifty-one per centum is deployed by the village government or mtaa for community development and conservation at the village level. Of the remaining thirty-nine per centum, the proponent remits nine per centum to the Designated National Authority, which disburses two per centum to the National Environmental Trust Fund, one per centum to the energy agency, and retains six per centum for carbon project management. Regulation 34(4) provides an exception for projects with high initial investment costs, in which case the sharing arrangements are negotiated between the Managing Authority and the Proponent, subject to guidance from the Designated National Authority under regulation 34(5).[128] Unlike the Kenyan model, the Tanzanian community's share flows not directly from the proponent to the community but through the Managing Authority and then through the village government or mtaa. This multi-step distribution chain, while consistent with Tanzania's tradition of decentralised resource governance under the Village Land Act 1999, introduces additional layers at which distribution may fail if intermediary institutions are subject to administrative weakness or capture. The exception in regulation 34(4) for high-investment-cost projects is a further source of indeterminacy: the condition of 'high initial investment costs' is not defined, and its breadth is unconstrained, creating a potential for the statutory default to be routinely displaced in precisely those projects with the highest revenues.

Jacob and D Brockington in their writing on Tanzanian carbon governance, has commended the requirement for benefit-sharing plans as a meaningful procedural advance but has criticised the framework's enforcement architecture, observing that the Regulations create the obligation to share without creating effective mechanisms for the vindication of the corresponding entitlements.[129] His critique resonates with the analysis of the Zambian framework in Chapter Three: an enforcement design that depends primarily upon administrative goodwill or upon ordinary contractual remedies will tend to under-deliver, particularly where the right-holders are rural communities of limited legal capacity.

4.3.4 Application of the evaluative criteria

On the evaluative criteria, the Tanzanian framework performs more strongly than a first reading might suggest. On statutory specificity, regulation 34(3) prescribes detailed distribution

[128] Environmental Protection Act 2025 (Act 1124) (Ghana); Ghana, Framework on International Carbon Markets and Non-Market Approaches (December 2022); Paris Agreement (n 4) art 6.
[129] Environmental Protection Act 2025 (Act 1124) (Ghana) s 150(2)(e).

percentages for land-based projects, a more specific schedule than the Zambian model, which specifies only a per-unit levy only for Article 6 projects without any minimum prescription for voluntary and for all other stakeholders. On participation, the centrality of village governance structures provides an institutional foundation for community engagement that the Zambian framework lacks. On transparency, project documents must be disclosed to the Designated National Authority, but public disclosure obligations are limited. The framework performs less well on enforceability: Mabele et al. critique applies with particular force to the multi-step distribution chain, each link of which represents a potential point of failure without accessible community remedies[130]. The framework also performs less well on clarity of carbon rights, given that it operates through tenure proxies and that the exception in regulation 34(4) introduces an indeterminacy whose scope is uncontrolled.

The Tanzanian lesson for Zambia is therefore nuanced. The positive lesson is that statutory revenue-sharing percentages, even at the level of subsidiary legislation, provide a more determinate foundation for community entitlement than a blank template requiring only a proposed benefit-sharing factor without any minimum. The cautionary lesson is threefold: first, statutory percentages alone do not deliver effective benefit-sharing if enforcement mechanisms across each link in the distribution chain are weak; second, the negotiated exception in regulation 34(4) demonstrates that an undefined carve-out can undermine the statutory floor in the projects where revenues are highest; and third, as Mabele has observed[131], obligations without effective remedies are doctrinally hollow, and legislative drafters must design enforcement pathways with attention to the practical capacity of communities to invoke them.

4.4 Principles and Lessons for Zambia's Reform Pathway

Having mapped the three jurisdictions and tested each against the evaluative criteria, the analysis now distils the lessons that bear most directly upon the reform of Zambia's framework. The lessons are organised around the criteria themselves so that the comparative findings respond to the precise deficits identified in Chapter Three.

[130] JF Lund, E Sungusia, MB Mabele and A Scheba, 'Promising Change, Delivering Continuity: REDD+ as Conservation Fad' (2017) 89 World Development 124 https://www.researchgate.net/publication/307359237_Promising_Change_Delivering_Continuity_REDD_as_Conservation_Fad Accessed 12 May, 2026

[131] Ghana, Framework on International Carbon Markets and Non-Market Approaches (December 2022); Paris Agreement (n 4) art 6.4.

4.4.1 Statutory minimum allocations as a floor against bargaining asymmetry

The first and most important lesson concerns the legislative technique of expressing benefit-sharing as a statutory floor. Both the Kenyan and Tanzanian frameworks demonstrate that explicit minimum percentages or distribution schedules, inscribed in legislation rather than left to a model agreement template, are both feasible and doctrinally productive. The Kenyan model is more robust, as the forty per centum minimum is anchored in the parent Act itself, section 23E(5)(b)(i) of the Climate Change Act making it resistant to displacement by subsidiary instruments; the Tanzanian model prescribes detailed ratios in the Regulations (regulation 34(3)) but remains susceptible to the undefined exception in regulation 34(4) and to ministerial amendment. As Boyd observed in the political-economy analysis adopted in Chapter Two, in the absence of clear statutory allocation ratios, benefit-sharing tends to become a function of bargaining power rather than of law.[132] The Zambian Carbon Market Regulations, 2026, in providing a Form II template that requires a "Proposed Benefit Sharing Factor" but no minimum, replicate precisely the design that Boyd identifies as structurally unfavourable to communities. A modest reform Parliament fixing a community-share floor either in section 21 of the GECC Act or in an amendment to the Carbon Market Regulations would address this deficit without displacing the contractual mechanism through which the share is operationalised.

4.4.2 Anchoring benefit-sharing in clear carbon rights

The second lesson concerns the upstream legal foundation upon which benefit-sharing rests. Both Kenya and, indirectly through its village governance architecture, Tanzania attach benefit-sharing to a clearly identified carbon or land entitlement. The Zambian framework, by contrast, vests carbon in the President under section 22 of the GECC Act but does not articulate the derivative rights of communities and landowners. As Cotula has demonstrated in his comparative study of carbon and biodiversity contracts in African jurisdictions, the legal silence on customary entitlement is the principal mechanism through which communities are displaced from the carbon value chain.[133] Reform might proceed in either of two directions. First, section 22 could be amended to recognise that the vesting of carbon in the President is held in trust for the citizenry and that customary occupiers and landowners retain a recognised

[132] W Boyd, 'Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance' (2010) 37 Ecology Law Quarterly 843.
[133] L Cotula, The Great African Land Grab? Agricultural Investments and the Global Food System (Zed Books 2013); L Cotula and J Mayers, Tenure in REDD+: Start-Point or Afterthought? (International Institute for Environment and Development 2009).

interest in the carbon stored on their lands.[134] Second, the Carbon Market Regulations could be amended to specify that the community development and benefit-sharing agreement gives effect to a pre-existing community interest in the carbon resource, rather than constituting a discretionary creation of the regulator. Either approach would address the Hohfeldian concern, taken up in Chapter Three, that an obligation without a corresponding entitlement amounts at best to a liberty rather than a right.[135]

4.4.3 Procedural integrity through a national registry and disclosure

The third lesson is institutional. A well-designed national registry, populated with public-facing data and integrated with the international tracking systems established under the Paris Agreement, can convert transparency commitments into enforceable operational practice. The Zambian National Carbon Registry, established under regulation 27 of the Carbon Market Regulations, 2026, has been correctly conceived but is yet to mature into an instrument of public accountability. Three design features observable in comparable frameworks are worth incorporating. First, the public-facing data fields should disclose, at minimum, the identity of the proponent, the location and area of the project, the volume of credits issued and the existence and status of the community development and benefit-sharing agreement. Second, the registry should publish anonymised summaries of community development agreements, identifying the benefit-sharing factor agreed in each case so that comparison and benchmarking are possible. Third, the registry should be integrated with the Auditor-General's reporting under section 36 of the GECC Act, so that share-of-proceeds collections and community-benefit disbursements become items of independent audit.[136]

4.4.4 Designing enforceability into the framework

The fourth lesson, derived principally from the Tanzanian experience, concerns the practical accessibility of remedies. Mabele's observation that obligations without effective enforcement mechanisms tend to under-deliver is corroborated, in the Zambian context, by the analysis in Chapter Three of section 28 arbitration and of ordinary contractual proceedings.[137] Two reforms are suggested by the comparative material. The first is the integration of a tiered

[134] HWO Okoth-Ogendo, Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya (ACTS Press 1991).
[135] WN Hohfeld, 'Some Fundamental Legal Conceptions as Applied in Judicial Reasoning' (1913) 23 Yale Law Journal 16.
[136] Green Economy and Climate Change Act 2024 (Act No 18 of 2024) (Zambia), s 36.
[137] Green Economy and Climate Change Act 2024 (Act No 18 of 2024) (Zambia), ss 21(7), 21(8), 22, 24(5) and 28.

grievance pathway that begins, before resort to arbitration, with a low-cost administrative complaints mechanism housed within the Department of Green Economy and Climate Change. The second is the conferral upon the Director of an explicit power to suspend or revoke the certificate of authorisation on grounds of breach of the community development and benefit-sharing agreement, supported by a clear statutory cause of action available to the affected community itself rather than dependent on regulatory initiative. Such pathways are consistent with the principle, articulated by Streck in the context of carbon market governance, that legal certainty depends upon clear, predictable and enforceable remedies as much as upon clear substantive rules.[138]

4.4.5 Operational free, prior and informed consent

The fifth lesson, drawn from Kenya and reinforced by Indonesia's negative example in the REDD+ literature considered in Chapter Two, concerns the operational status of free, prior and informed consent. Kenya's Climate Change (Carbon Markets) Regulations 2024 already require documentation of free, prior and informed consent for all community land-based carbon projects under regulation 16(l), representing an operationalisation of the FPIC standard at subsidiary legislation level.[139] The Zambian framework currently requires consultation but not consent: regulation 8(1)(e) requires the project developer to conduct stakeholder consultations, and regulation 22(2) requires the agreement to be signed by the community as well as the developer and the Government. Consultation is the duty to listen; consent is the right to refuse. Where land-use restrictions impose significant burdens upon customary livelihoods, the rule-of-law concerns identified by Lyster and Kameri-Mbote arise with particular force.[140] A modest reform would be to amend regulation 8 to require that the comprehensive stakeholder consultations include the procurement of free, prior and informed consent in accordance with the United Nations Declaration on the Rights of Indigenous Peoples and the Cancun Safeguards, and to render the absence of such consent a ground upon which the Director may refuse authorisation.

[138] C Streck, 'Who Owns REDD+? Carbon Rights, Carbon Accounting and the Future of Land-Based Climate Action' (2020) 11(6) Carbon Management 339; C Streck and J Lin, 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) 19(2) European Journal of International Law 409.
[139] A Dermawan, E Petkova, A Sinaga, M Muhajir and Y Indriatmoko, Preventing the Risk of Corruption in REDD+ in Indonesia (Centre for International Forestry Research 2011); see Chapter Two, section 2.5.3 of this thesis.
[140] R Lyster, 'REDD+, Transparency, Participation and Resource Rights: The Role of Law' (2011) 14(2) Environmental Science and Policy 118; P Kameri-Mbote, 'Land Tenure, Land Use and Sustainability in Kenya: Towards Innovative Use of Property Rights in Wildlife Management' in J Wily and others (eds), The Human Right to a Green Future (Cambridge University Press 2012).

4.4.6 Constitutional alignment

The sixth and final lesson is one of constitutional fidelity. Article 255 of the Constitution of Zambia enshrines the principle of sustainable development and the equitable use of natural resources for the benefit of present and future generations.[141] In Kenya, an analogous constitutional commitment under Article 69 is operationalised through statutory ratios that translate the constitutional value into a determinate distributive rule. The comparative analysis therefore suggests that the Zambian Parliament's omission to articulate substantive benefit-sharing standards in primary legislation is not merely a matter of legislative preference but a matter of constitutional discharge. Whether the present design satisfies the constitutional standard of legality, which the Constitutional Court has applied to essential matters affecting the rights of citizens, is a question that the present study commends to further doctrinal attention.

4.5 Conclusion

This chapter has examined three African jurisdictions Kenya and Tanzania that have moved earlier or more comprehensively than Zambia to address the benefit-sharing question in their carbon governance regimes. Kenya supplies the legislative technique of statutory ratios anchored in clearly defined carbon entitlements. Tanzania illustrates both the value of statutory revenue-sharing percentages and the cost of inadequate enforcement design, particularly where distribution must pass through multiple institutional intermediaries. Read alongside the Indonesian REDD+ literature considered in Chapter Two, the comparative material yields a coherent set of reform principles that responds directly to the deficits identified in Chapter Three: a statutory minimum community share and an upstream recognition of carbon rights.

These lessons do not exhaust the design space for Zambian reform. They do, however, supply a tested doctrinal vocabulary in which Zambian legislative drafters may articulate the substantive entitlements that Chapter Three found to be missing. The final chapter draws together the findings of the study, advances conclusions on the adequacy of Zambia's benefit-sharing framework against the evaluative criteria and develops a structured set of recommendations addressed to Parliament, to the Minister responsible for carbon market regulation, and to the institutions that will give operational content to whatever reforms Parliament chooses to adopt.

[141] Constitution of Zambia (Amendment) Act 2016 (Act No 2 of 2016), art 255.

CHAPTER FIVE: CONCLUSION, SUMMARY AND RECOMMENDATIONS

5.1 Introduction

This concluding chapter draws the study together. It returns to the three questions posed in Chapter One and states how each has been answered. The first research question asked what legal framework presently governs benefit-sharing in land-based carbon projects in Zambia; the study has shown that it comprises the Constitution, the Green Economy and Climate Change Act, 2024, the Carbon Market Regulations, 2026 and the residual forest-carbon regime under the Forests Act, 2015. The second asked how adequate, certain and enforceable that framework is; measured against the six criteria developed in Chapter Two, the study has found it procedurally elaborate but substantively deficient. The third asked what lessons Zambia might draw from comparable jurisdictions; Chapter Four identified concrete legislative techniques in Kenya and Tanzania.

The chapter is organised in five parts. This introduction (5.1) recalls the research questions and the study's answers to them. Section 5.2 sets out the findings in full. Section 5.3 summarises those findings and states the conclusions on the adequacy and certainty of Zambia's framework, organised around fairness, predictability and accountability. Section 5.4 advances recommendations addressed to Parliament, to the Minister and to the implementing institutions. Section 5.5 offers the final conclusion, including the limitations of the study and areas for further research.

5.2 Findings

5.2.1 The Current Legal Framework

The first research question asked what legal framework presently governs benefit-sharing in land-based carbon projects in Zambia. The doctrinal mapping in Chapter Three established that the framework comprises four interlocking instruments. The Constitution of Zambia, as amended in 2016, provides the foundational principle of equitable use of natural resources under Article 255 and the principle of legality that requires essential matters of rights to be regulated by Parliament.[142] The Green Economy and Climate Change Act, 2024 ("GECC Act") supplies the primary statutory architecture, with section 22 vesting carbon in the President,

[142] Constitution of Zambia (Amendment) Act 2016 (Act No 2 of 2016), art 255; see further Chapter Two, section 2.8 of this thesis.

section 21(7) and (8) contemplating a community development and benefit-sharing agreement, section 24(5) requiring the Director to "have regard to" benefit-sharing in authorisation decisions and section 28 routing disputes into arbitration.[143] The Green Economy and Climate Change (Carbon Market) Regulations, 2026 operationalise the Act through a tiered share of proceeds in the Third Schedule, a model agreement template in Form II and a National Carbon Registry under regulation 27.[144] The Forests Act, 2015 and the Forests (Carbon Stock Management) Regulations of 2021 retain residual application to forest-based carbon, producing a layered framework whose internal co-ordination is imperfect.[145]

Two features of this architecture are worth restating. First, the framework is procedurally elaborate. It establishes the Department of Green Economy and Climate Change, the Technical Committee, the Director and the National Carbon Registry, and it imposes upon proponents a clearly mapped sequence of concept-note, project-proposal, validation and verification obligations. Second, the framework is substantively under-determined. The Act does not articulate the derivative entitlements that flow from the sovereign vesting of carbon; it does not specify the trigger of the community development and benefit-sharing obligation; and it does not prescribe a minimum community share. The substantive content of the framework is, in short, displaced from primary legislation into subsidiary instruments and, ultimately, into the contractual sphere.

5.2.2 Adequacy, Certainty and Enforceability

The second research question concerned the adequacy, certainty and enforceability of the existing provisions. The application of the six evaluative criteria developed in Chapter Two produced an asymmetric verdict.[146]

On clarity of carbon rights, the framework performs poorly. The vesting clause in section 22 of the GECC Act establishes carbon as a public asset but fails to articulate the derivative rights of communities, landowners and customary occupiers. Read against Cotula's comparative analysis, the silence on customary entitlement is the principal mechanism through which

143 Green Economy and Climate Change Act 2024 (Act No 18 of 2024) (Zambia), ss 21(7), 21(8), 22, 24(5) and 28.
144 Green Economy and Climate Change (Carbon Market) Regulations 2026, Statutory Instrument No 5 of 2026 (Zambia), regs 20, 21, 22 and 27, and the Third Schedule.
145 Forests Act 2015 (Act No 4 of 2015) (Zambia); Forests (Carbon Stock Management) Regulations, Statutory Instrument No 66 of 2021 (Zambia); see further Chapter Three, section 3.4 of this thesis.
146 See Chapter Three, section 3.6 of this thesis.

communities are displaced from the carbon value chain.[147] On statutory specificity, the framework performs poorly. Section 21(7) defers the substantive content of the community development and benefit-sharing agreement to "particulars as prescribed", and regulation 22 of the Carbon Market Regulations, although operationally more detailed than the parent provision, prescribes neither a minimum community share nor a formula for the calculation of the Benefit Sharing Factor. On enforceability, the framework performs poorly. Section 28 arbitration is financially and procedurally inaccessible to rural communities, the compliance order regime is discretionary, and ordinary contractual proceedings depend on the very capacity that the framework's intended beneficiaries lack. On transparency and accountability, the framework performs moderately. The National Carbon Registry has been correctly conceived, but the framework imposes no public-disclosure obligation in respect of community development and benefit-sharing agreements and no independent oversight of community-level revenue flows. On participation, the framework requires consultation but stops short of free, prior and informed consent. On constitutional alignment, the framework's reliance on subsidiary instruments to give content to essential matters of rights raises a doctrinally serious question about its fidelity to Article 255 and to the principle of legality.[148]

5.2.3 Comparative Lessons

The third research question asked what lessons Zambia could draw from comparator jurisdictions. Chapter Four examined Kenya and Tanzania, each of which has moved earlier or more comprehensively than Zambia along the legislative pathway.

The Kenyan framework, organised around the Climate Change Act as amended by the Climate Change (Amendment) Act, 2023, and the Climate Change (Carbon Markets) Regulations, 2024, prescribes a minimum community share of forty per centum of aggregate annual earnings, less cost of doing business, in land-based carbon projects, anchored in section 23E(5)(b) of the Act and confirmed by regulation 29(1)(a) of the 2024 Regulations.[149] The ratio sits upon a recognition of community land institutions as legal counterparties under the Community Land Act, 2016, and is supplemented by a free, prior and informed consent

[147] L Cotula, The Great African Land Grab? Agricultural Investments and the Global Food System (Zed Books 2013); L Cotula and J Mayers, Tenure in REDD+: Start-Point or Afterthought? (International Institute for Environment and Development 2009).
[148] See Chapter Three, section 3.6.6 of this thesis.
[149] Climate Change Act (Cap 387A) (Kenya), s 23E(5)(b), as amended by the Climate Change (Amendment) Act 2023 (Act No 9 of 2023) (Kenya); Climate Change (Carbon Markets) Regulations 2024, LN 84 (Kenya), reg 29(1)(a).

requirement at the subsidiary legislation level under regulation 16(l) of the 2024 Regulations.[150] The Tanzanian framework, under the Environmental Management (Control and Management of Carbon Trading) Regulations, 2022, prescribes a detailed revenue-sharing schedule under regulation 34(3), with sixty-one per centum of gross revenues from land-based projects directed to the Managing Authority and ultimately to village governments. It anchors community participation in the village governance architecture of the Village Land Act, 1999, but qualifies the statutory floor through a high-investment-cost exception in regulation 34(4) whose boundaries are undefined.[151]

5.3 Summary of Findings

The findings yield three reasoned conclusions, which can be expressed through the proposal's framing of fairness, predictability and accountability.

On fairness, the framework falls short. The constitutional commitment to the equitable use of natural resources in Article 255 cannot be discharged through a statutory design that leaves the proportion of carbon revenues accruing to host communities to be determined in private negotiation between proponents and counterparties of unequal informational and legal capacity. As Boyd has argued in the political-economy literature relied upon in Chapter Two, in the absence of clear statutory allocation ratios, benefit-sharing becomes a function of bargaining power rather than of law.[152] The Form II template in the First Schedule to the Carbon Market Regulations does not cure this deficit: it requires a "Proposed Benefit Sharing Factor" but specifies no minimum, no floor and no formula. The fairness question is not whether the framework permits equitable outcomes; it is whether the framework requires them. On the present design, it does not.

On predictability, the framework falls short for a different reason. The volume-based formula in the Third Schedule to the Carbon Market Regulations imposes a per-unit levy that bears no relationship to the underlying price at which credits trade, and the share-of-proceeds is described as a payment from the proponent to the State rather than as a community

[150] Community Land Act 2016 (Act No 27 of 2016) (Kenya); Climate Change (Carbon Markets) Regulations 2024, LN 84 (Kenya), reg 16(l).
[151] Environmental Management (Control and Management of Carbon Trading) Regulations 2022, GN No 636 (Tanzania), reg 34(3) and reg 34(4); Village Land Act 1999 (Act No 5 of 1999) (Tanzania).
[152] W Boyd, 'Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance' (2010) 37 Ecology Law Quarterly 843; see Chapter Two, section 2.4.4 of this thesis.

entitlement.[153] Communities cannot predict what they will receive, because the framework neither specifies a percentage nor links the calculation to a value that the community can verify. Proponents face a related but distinct predictability problem: they incur the administrative cost of benefit-sharing without a statutory floor against which to price project risk, with the consequence that project risk premia remain elevated even as the regime imposes increasing compliance burdens. As Streck has argued, carbon market predictability requires clear, predictable and enforceable allocation rules.[154] The Zambian framework supplies none of these in respect of the community share.

On accountability, the framework also falls short, although less severely than on fairness and predictability. The National Carbon Registry is in place; the verification regime requires reporting on the implementation of benefit-sharing agreements; and section 36 of the GECC Act subjects the Green Economy and Climate Change Fund to audit by the Auditor-General. What is missing is the public-disclosure architecture that would convert these institutional foundations into operational accountability: the publication of agreements, the disclosure of share-of-proceeds collections and the independent oversight of community-level disbursements. As the comparative analysis in Chapter Four showed, transparency without disclosure is, in the carbon governance context, a procedural placebo.

The cumulative conclusion is that the framework, as it presently stands, codifies the architecture of carbon trading without codifying the architecture of carbon justice. This is the central finding of the study.

5.4 Recommendations

The recommendations that follow are addressed to three principal audiences and are organised by instrument. The recommendations identify the specific provision to be amended, the substantive content of the proposed amendment, and the institution upon which the obligation falls.

[153] Green Economy and Climate Change (Carbon Market) Regulations 2026, Statutory Instrument No 5 of 2026 (Zambia), Third Schedule; see Chapter Three, section 3.5.2 of this thesis.

[154] C Streck, 'Who Owns REDD+? Carbon Rights, Carbon Accounting and the Future of Land-Based Climate Action' (2020) 11(6) Carbon Management 339; C Streck and J Lin, 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) 19(2) European Journal of International Law 409.

5.4.1 To Parliament: Primary Legislative Reform of the GECC Act

The first set of recommendations is addressed to Parliament. Five amendments to the GECC Act are proposed.

First, in as much as it can be inferred from other laws governing natural resources like land and mineral resources, that the state hold these resources in trust for its people, section 22 should be amended to make explicit the fiduciary character of the President's vesting and to preserve the derivative entitlements of communities and landowners. The amended provision should expressly state that the vesting is held in trust for the citizenry, that customary occupiers and landowners retain a recognised interest in the carbon stored on their lands and that any benefit-sharing arrangement under the Act gives effect to, rather than creates, that interest. The reform addresses the criterion of clarity of carbon rights and is consistent with Okoth-Ogendo's classical analysis of fiduciary trusteeship in African natural-resource law.[155]

Second, section 21(7) should be amended to remove the "where applicable" qualifier and to fix in primary legislation the trigger of the community development and benefit-sharing obligation. The provision should require that a community development and benefit-sharing agreement be concluded in respect of every land-based carbon project that imposes land-use restrictions on a host community or landowner, irrespective of the size of the project or the formality of the community's tenure. The reform addresses the rule-of-law concern identified in Chapter Three about discretionary triggers that admit of no statutory criteria.

Third, a new subsection should be inserted in section 21 prescribing a minimum community share of carbon revenues. Drawing on the Kenyan model, the minimum should be expressed as a floor of not less than forty per centum of the aggregate net earnings of the project in respect of land-based activities, with provision for a lower minimum for non-land-based activities. The figure is suggested as a benchmark consistent with the comparative material; the precise figure is properly a matter for Parliament. What is essential is that the minimum be fixed in primary legislation rather than left to a regulation-deferred template. More fundamentally, the reform should prescribe how the proceeds are allocated among all three parties to the agreement, namely a defined community minimum, a defined State share and the developer's residual, so that benefit-sharing is governed by a single, transparent allocation rather than left to negotiation, as the Kenyan and Tanzanian models demonstrate.

[155] HWO Okoth-Ogendo, Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya (ACTS Press 1991); see Chapter Two, section 2.4.2 of this thesis.

Fourth, section 24(5)(c) should be amended to replace "have regard to" with a mandatory standard. The Director should be required to satisfy himself that the project's benefit-sharing arrangements comply with the statutory floor and with the procedural requirements set out in the Act and Regulations before issuing a certificate of authorisation. The amendment converts benefit-sharing from a discretionary consideration into a substantive precondition of authorisation.

Lastly but not the least, the regulations should not only provide a levy for the state for the projects done under Article 6. The regulations should be able to also state how the benefits are shared among key stakeholders even if the participation is through the voluntary market because this is the most active approach at the moment in Zambia. Additionally, even if it is voluntary participation, all stakeholders such as the landowner, the state, the community and project developer do actively participate in land-based projects , hence it is crucial that the Act and the regulations are amended to take into account how proceeds are shared despite being realized through the voluntary market.

5.4.2 To the Minister: Subsidiary Regulatory Reform of the Carbon Market Regulations

The second set of recommendations is addressed to the Minister responsible for green economy and climate change, acting under the regulation-making power in section 46 of the GECC Act. Four amendments to the Carbon Market Regulations, 2026 are proposed.

First, the Third Schedule should be redesigned to replace the volume-based share-of-proceeds with an ad valorem formula calculated by reference to the gross or net earnings of the project. The redesigned formula should preserve a sovereign share for the Climate Change Fund while ensuring that the community share is a percentage of project value, capable of tracking the underlying commercial performance of the project. The redesigned share of proceeds should also extend to voluntary-market activity and not only to Article 6 transfers, so that the bulk of current projects is captured, and a defined portion of the proceeds paid into the Climate Change Fund should be ring-fenced for return to host communities.

Second, regulation 22 should be amended to specify the minimum content of the community development and benefit-sharing agreement. The minimum should include the agreed percentage community share (which cannot fall below the statutory floor introduced under recommendation 5.3.1), the methodology for calculating the share, the identity and governance arrangements of the community institution receiving the share, the categories of non-financial benefit to which the community is entitled and the reporting obligations of the proponent in respect of the agreement.

Third, regulation 8(1)(e) should be amended to require, in addition to comprehensive stakeholder consultations, the procurement and documentation of free, prior and informed consent in accordance with the United Nations Declaration on the Rights of Indigenous Peoples and the Cancun Safeguards. The absence of documented consent should be a ground upon which the Director may refuse, suspend or revoke the certificate of authorisation. The drafting model is provided by regulation 16(l) of the Kenyan Climate Change (Carbon Markets) Regulations, 2024.[156]

Fourth, regulation 27 should be amended to require that the National Carbon Registry publish, on a public-facing portal: the identity of every authorised proponent, the location and area of every authorised project, the volume of credits issued in respect of each project, the existence and status of the community development and benefit-sharing agreement and an anonymised summary of the Benefit Sharing Factor agreed in each case.[157]

5.4.3 To the Institutions: Implementation and Oversight

The third set of recommendations is addressed to the institutions that administer the framework in practice. The Department of Green Economy and Climate Change should issue guidelines under section 45 of the GECC Act setting out the criteria by which the adequacy of community development and benefit-sharing agreements will be assessed in the authorisation process, with particular attention to the identification of community counterparties on customary land and to the verification of free, prior and informed consent. The Zambia Environmental Management Agency should integrate community benefit-sharing compliance into its environmental impact assessment review function, so that the substantive equity of carbon projects is scrutinised alongside their environmental integrity. The Auditor-General, exercising the audit mandate over the Green Economy and Climate Change Fund under section 36 of the Act, should be empowered and resourced to extend that audit to community-level disbursements and to share-of-proceeds collections, completing the accountability architecture that the Act envisages but has not yet operationalised.[158]

[156] Climate Change (Carbon Markets) Regulations 2024, LN 84 (Kenya), reg 16(l).
[157] Environmental Protection Act 2025 (Act 1124) (Ghana), s 150(2)(e).
[158] Green Economy and Climate Change Act 2024 (Act No 18 of 2024) (Zambia), ss 36, 45 and 46.

5.5 Final Conclusion

The study has been conducted under three principal constraints, identified at the outset in Chapter One. First, the legal framework under examination is of recent vintage: the GECC Act was assented to on 20 December 2024 and the Carbon Market Regulations were gazetted on 9 January 2026, with the consequence that there is, at the time of writing, no case law on either instrument and no settled body of regulatory practice. Second, Zambian academic literature directly addressing the post-2024 architecture is limited. Third, the analysis has been doctrinal rather than empirical, focused on the design of the legal framework rather than on outcomes for communities or proponents in practice.

Three lines of further enquiry follow. First, empirical research is needed on how the community development and benefit-sharing agreement template in Form II is being applied at project level. Whether the absence of a statutory minimum is producing the bargaining-asymmetry effects predicted by the doctrinal analysis is, ultimately, an empirical question. Second, comparative legal research could be deepened along axes that the present study did not pursue, including comparative work on the constitutional standard of legality as applied to delegated legislation in carbon governance, and comparative work on the institutional pathways through which fiduciary trusteeship over public natural resources is operationalised in African jurisdictions. Third, work on the relationship between forest-based and non-forest carbon governance in Zambia is overdue: the bifurcated architecture produced by section 19 of the GECC Act warrants a separate doctrinal study.

The GECC Act, is, in many respects, a welcome legislative development. It places climate governance on a comprehensive statutory footing for the first time in Zambian history, and the Carbon Market Regulations, 2026 supply much of the procedural detail that the Act itself omits. The question this study has sought to answer is not whether the framework exists or whether it is well-intentioned. It is whether the framework discharges Parliament's constitutional duty to translate equitable resource use into operational statutory rules. On that question, the present design is incomplete.

The reforms recommended above are modest in scope but substantial in consequence. They do not require Parliament to reconceive the architecture of Zambia's carbon market. They require Parliament to do for benefit-sharing what it has already done for the procedural and institutional aspects of carbon governance: to articulate, in primary and subsidiary legislation, the substantive content of the rights and obligations that the framework purports to create. Until that work is done, the promise of carbon trading as a vehicle for sustainable development in Zambia will rest upon a foundation that, on the present analysis, is insufficiently equal to the constitutional and distributive demands placed upon it. The legislative task is to convert the architecture of carbon trading into the architecture of carbon justice. The materials for that task are available in the Zambian Constitution, in the comparative experience of African peer states and in the doctrinal tradition that this study has sought to bring to bear. What remains is the political and institutional will to take them up.

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