



**PROMOTING EQUITY IN KENYA’S CARBON MARKETS: LEGAL LESSONS  
AND STRATEGIES FOR INCLUSIVE PARTICIPATION AND BENEFIT -  
SHARING IN KENYA**

Submitted in partial fulfilment of the requirements of the Bachelor of Laws Degree, Strathmore  
University Law School

BY: KIAMBO ERIC NJAGI.

145867

Prepared under the supervision of  
PURITY WANGIGI

(January 2025)

(11,529 words excluding bibliography, preliminaries and footnotes)

## Declaration

I, KIAMBO ERIC NJAGI, do hereby declare that this research is my original work and that to the best of my knowledge and belief, it has not been previously, in its entirety or in part, been submitted to any other university for a degree or diploma. Other works cited or referred to are accordingly acknowledged.

Signed: .....

Date: .....

## **Acknowledgements**

Above all, I want to express my gratitude to God for giving me the courage, wisdom, and endurance I needed to complete this dissertation. This work would not have been feasible without His favor.

I am incredibly appreciative of my supervisor, Ms. Purity Wangigi, for her important advice, support, and helpful criticism, all of which have greatly influenced the direction of this study.

I also want to express my sincere gratitude to my family and friends for their unwavering prayers, support, and patience, all of which helped me stay motivated and focused during this process.

Lastly, I am thankful to Strathmore University for providing the resources and an enabling environment that made this research possible.

## **Table of contents**

Declaration	2
Acknowledgements	3
Table of contents	4
List of legal instruments	5
List of Cases	6
List of abbreviations	7
Abstract	8
Background to the study	1
Problem statement	3
Research objectives	5
Research questions	5
Justification/Significance of the Research	6
Hypothesis	7
Theoretical Framework of the Research	7
Literature review	8
Research design and methodology	11
Limitations	12
Chapter breakdown	13
Research timeline	14
Bibliography	15
List of legal instruments	15
CHAPTER 2:From Global Frameworks to Local Action: Carbon Trading and Kenya’s Emerging Market	17
The Evolution of Carbon Markets Globally and Regionally	18
The Carbon Markets in Kenya	22
CHAPTER 3:Voluntary Carbon Markets and Social Justice: Best Practices for Realising Equitable Resource Distribution in Kenya.	25
Significance of the Right to Clean and Healthy Environment as Enshrined in the Constitution of Kenya in Relation to Voluntary Carbon Markets	25
Conceptual framework and the importance of equitable distribution in the carbon markets context	27
Case Studies from Global Models For Sustainable Carbon Trading	29
Chapter 4: Adapting Global Best Practices: Enhancing Equity and Social Justice in Kenya’s Carbon Market Policies.	37
CHAPTER5: TOWARDS AN EQUITABLE CARBON MARKET IN KENYA	43
Bibliography	45

## **List of legal instruments**

1. The Constitution of Kenya (2010)
2. Paris Climate Agreement
3. Kyoto Protocol.
4. Climate Change (Amendment) Act (2023)
5. Carbon Credit Trading and Benefit Sharing Bill (2023)
6. Climate Change (Carbon Markets) Regulations (2024)

## **List of Cases**

1. Amina Said Abdallah & 2 others V County Government of Kilifi, [2017] eKLR.
2. Moffat Kamau & 9 others V Aeolus Kenya Ltd & 9 others, Constitutional Petition 13 of 2015, [2016] eKLR

## **List of abbreviations**

Nationally Determined Contributions	NDC
Non - Governmental Organisation	NGO
Environmental, Social and Governance	ESG
Voluntary Carbon Market	VCM
Clean Development Mechanism	CDM
British Broadcasting Corporation	BBC
United Nations Framework Convention on Climate Change	UNFCCC
Payment for Environmental Services	PES

## **Abstract**

*This research proposal aims to provide an analysis of carbon trading markets globally and their implications here in Kenya. The study looks into the social and economic effects of carbon trading on local indigenous communities in Kenya, as well as the degree of community involvement and participation in emission reduction initiatives.*

*The research will also draw from other jurisdictions' experiences with their voluntary carbon markets and aim to identify best practices in utilising the voluntary carbon markets to achieve equitable resource distribution and uphold the right to clean and healthy environment as enshrined in Article 42 of the Constitution of Kenya (2010). By examining both global and local dynamics, the study intends to contribute valuable insights to the effectiveness, equity, and sustainability of carbon trading mechanisms in Kenya and propose recommendations for enhancing their benefits for both the environment and local communities.*

## **Background to the study**

All life on earth, humans included, depends on energy coming from the sun. Living organisms also depend on the energy reflected from the earth's surface back into the atmosphere. This balance between energy coming in and energy going out has been maintained for billions of years, allowing life on earth to thrive.<sup>1</sup> But what happens if excess greenhouse gases in the earth's atmosphere block more energy from leaving the atmosphere, upsetting that balance? What if, instead of leaving the atmosphere and going back into space, some of the excess energy is returned to the earth's surface? Put simply, the earth—including its oceans, land and air—heats up.<sup>2</sup>

One of the biggest contributors of global warming are the greenhouse emissions from our daily human activities. It is on this note that it is important to discuss carbon offsetting. Carbon markets may be defined as the trading systems in which carbon credits are traded.<sup>3</sup> Carbon credits, on the other hand, may be defined as a tradable instrument which represents one tonne of carbon dioxide removed from the environment.<sup>4</sup>

Back in 1997, when thirty-seven industrialised countries and the European Community committed themselves to reducing emissions of carbon dioxide and other greenhouse gases as part of the Kyoto Protocol, the public debate focused largely on how to design one global market for trading carbon permits as 'the sole' vehicle to address global climate change. The reason for the need to design a single carbon market was because one tonne of a greenhouse gas emitted anywhere in the world has the same climate change effect for everyone.<sup>5</sup> A single global market was therefore thought to be an economically sound outcome, equalising incentives to reduce

---

<sup>1</sup> Armstrong, A, 'Climate change science: The facts' in Armstrong K(ed), *Communicating climate change: A guide for educators*, 1st ed, Cornell University Press, New York, 2018, 7-20.

<sup>2</sup> Armstrong, A, 'Climate change science: The facts' in Armstrong K(ed), *Communicating climate change: A guide for educators*, 1st ed, Cornell University Press, New York, 2018, 7-20.

<sup>3</sup> UNDP blog post, *What are carbon markets and why are they important?*, May 18 2022.

<sup>4</sup> Peterdy Kyle, *Carbon Credits*, Corporate Finance Institute, 2015, PP1

<sup>5</sup> Richard G Newell, *Carbon markets 15 years after Kyoto: Lessons learned, new challenges*, 27(1), *The journal of Economic Perspectives*, 2013, pp 123-146

greenhouse gases emissions everywhere.<sup>6</sup> This dream that was carved in the late 90's, however, today, seems far away.

Instead, what we are seeing now is the multiplicity of national and regional regulation on carbon dioxide and greenhouse gases emission.<sup>7</sup> Among the most notable are the Emission Trading system set up by the European Union in 2005, the New Zealand Trading Scheme and the Regional Greenhouse Gas Initiative in the United States, just to mention but a few.<sup>8</sup>

Today, carbon markets are divided into compliance and voluntary markets. The compliance market is regulated by national and global authorities who determine a cap on the amount certain sectors can release into the environment in order to achieve their Nationally Determined Contributions(NDC) under the Paris Agreement Article 4.<sup>9</sup> The authorities track the carbon footprints for the entities and determine if their emissions went beyond the prescribed limit. Entities that go beyond the prescribed thresholds in carbon emissions are left with no option but to buy or use saved credits to stay below the emissions limit.

In the voluntary market, carbon credits trade is on a voluntary basis. The participants therefore operate outside the compliance markets. This provides a flexible trading scheme for players to voluntarily offset their emissions by purchasing carbon credits. The main difference between the voluntary carbon market and compliance markets is the ability to participate in voluntary markets regardless of the participant's geographical location.<sup>10</sup>

Carbon markets look set to grow exponentially within the next few years. Some analysts estimate that within the next few years the carbon trading market will start to rival current trading in established commodities such as gold, oil and gas.<sup>11</sup> This may be attributed to the recognition

---

<sup>6</sup> Richard G Newell, Carbon markets 15 years after Kyoto: Lessons learned, new challenges, 27(1), The journal of Economic Perspectives, 2013, pp 123-146

<sup>7</sup> Richard G Newell, Carbon markets 15 years after Kyoto: Lessons learned, new challenges, 27(1), The journal of Economic Perspectives, 2013, pp 123-146

<sup>8</sup> Richard G Newell, Carbon markets 15 years after Kyoto: Lessons learned, new challenges, 27(1), The journal of Economic Perspectives, 2013, pp 123-146

<sup>9</sup> Article 4, Paris Climate Agreement(2015), 54113 UNFCCC.

<sup>10</sup> UNDP blog post, What are carbon markets and why are they important?, May 18 2022.

<sup>11</sup> Samuel Fankhauser, Designing Carbon Markets. Part 1: Carbon Markets in Time, (38) Energy Policy, 2010, 2

that any meaningful climate change policy must put a long - term price on carbon, which would ideally provide private capital owing to the relatively new green/climate funding.<sup>12</sup>

As a signatory to the Paris Agreement, Kenya has made noteworthy developments towards fulfilling the Paris Agreement's objective of limiting global temperatures to 1.5 degrees Celsius.<sup>13</sup> In particular, Kenya committed to developing domestic legislation to govern her engagement in the carbon market and non - market mechanisms in her Updated Nationally Determined Contribution, 2020.<sup>14</sup>

Fast-forward, 1st September 2023 saw the assent of the Climate Change (amendment) Act No.9 of 2023 here in Kenya following development by the Ministry of Environment, Climate Change and Forestry.<sup>15</sup> The Climate Change (Amendment) Act of 2023 in Kenya marked a pivotal moment in the nation's climate policy framework, setting the stage for more robust and structured approaches to climate action. This legislative amendment was instrumental in paving the way for the introduction of the Carbon Credit Trading and Benefit Sharing Bill, a significant step towards formalising the carbon market in Kenya. The Bill, once enacted, is expected to provide a legal and institutional framework for carbon trading, thereby enabling Kenya to better participate in global carbon markets and drive climate resilience efforts. This notwithstanding, the Climate Change (amendment) Act and the Carbon Credit Trading Bill have their fair share of shortcomings.

## **Problem statement**

In the Climate Change (amendment) Act and the Carbon Credit Trading and Benefit Sharing Bill key attention has been paid to the interest of private entities and the National and County governments, at the expense of the interests of indigenous Kenyan communities. In Kenya, sixty percent of the land is held communally while thirty percent is privately owned. The rest is public land.<sup>16</sup> Where land is held communally, every community member has the right to access

---

<sup>12</sup> Samuel Fankhauser, Designing Carbon Markets. Part 1: Carbon Markets in Time,(38) Energy Policy,2010, 4

<sup>13</sup> Article 2, Paris Climate Agreement, (2015), 54113 UNFCCC.

<sup>14</sup> Ministry of Environment and Forestry, Updated Nationally Determined Contribution 2020, 24th Dec 2020.

<sup>15</sup> Climate Change (Amendment) Act, No.9, 2023.

<sup>16</sup> Alden L, Wily, The Community Land Act in Kenya. Opportunities and challenges for communities, 7(1) 1-25 (2018)

resources on that land, and their use of the land should not interfere with other members' rights to those resources.<sup>17</sup> Many Kenyans today depend on natural resources on these community lands for survival. It is from such lands that they are able to earn an income and feed their families and also educate their children. The Maasai for instance are nomadic and require free roaming in these community lands to feed their animals. The introduction of the aforementioned legislations might lead to the unequivocal denial of such communities to their constitutional rights. Persecution and harassment have already been experienced by other groups. The business and social relationships have been disrupted by the widespread stock confiscation of Boran and Sakuye nomads. The Gabbra nomads were denied access to customary summer grazing when the Sibiloi Nature Reserve was established.<sup>18</sup>

The provisions in the above legislations largely neglect the fact that the majority of the designated areas where such projects are set to take place are community land. The failure to inculcate the role community members may play in this decision making process by and large puts their equitable right to the lands at stake. The Carbon Credit Trading and Benefit Sharing Bill for instance only mentions that affected indigenous communities have a right to 'adequate compensation' where they stand to be affected.<sup>19</sup> Both pieces of legislation are silent on what adequate compensation in the case of an entire community may be. Both pieces of legislation are silent on how each and every member of the community stands to be compensated in the event that they are affected by the regulations. Further, the legislations provide no benefit sharing formula among the national government, county governments, communities and other stakeholders.

This paper will look to analyse the economic viability of the new Kenyan carbon markets and the impact on indigenous communities. These populations frequently suffer the most from the effects of climate change and support conservation initiatives that result in carbon credits. Yet, they are marginalised when it comes to the distribution of financial benefits from these credits. The lack of a benefit-sharing mechanism not only undermines social justice but also risks disenfranchising communities that are vital to the success of carbon offset projects.

---

<sup>17</sup> Alden L, Wily, *The Community Land Act in Kenya. Opportunities and challenges for communities*, 7(1) 1-25 (2018)

<sup>18</sup> <https://www.refworld.org/reference/countryrep/mrgi/2018/en/120315>, on 2nd September, 2024.

<sup>19</sup> Section 69, Carbon Credit Trading and Benefit Sharing Bill (2023)

## **Research objectives**

In light of the above, this research aims to interrogate the existing legal framework on carbon markets in Kenya so as to understand whether and to what extent the existing and proposed legal framework protects the equitable interests of all stakeholders in the trade - the indigenous communities and the investors alike.

In particular, the study will:

1. Analyse the legal and institutional framework on carbon trading markets globally and regionally and narrow down the scope to the carbon trading scene locally.
2. Assess the level of community engagement and participation in carbon offset projects and investigate the social and economic effects of carbon trading projects on local communities.
3. Analyse the best practice lessons we can learn from Norway, Brazil and Costa Rica on how voluntary carbon markets may be used to realise equitable distribution of resources and consequently realise the right to clean and healthy environment, including the right to have the environment protected for the benefit of present and future generations through legislation and other measures, as guaranteed by Article 42 of the Constitution of Kenya 2010.

## **Research questions**

The following research questions will serve as a guide for this study in order to accomplish the aforementioned goals:

1. How does the structure and operation of global carbon trading markets compare with the regional and local carbon trading scene, and what are the key factors influencing the effectiveness and equity of carbon trading locally?
2. To what extent are local communities engaged and participating in carbon offset projects, and what are the social and economic implications of carbon trading initiatives on these communities in terms of empowerment, livelihoods, and overall well - being?
3. What lessons can Kenya draw from Norway's, Brazil's and Costa Rica's experience with voluntary carbon markets to inform strategies for achieving equitable distribution of

resources and upholding the right to clean and healthy environment, as enshrined in Article 42 of the Constitution of Kenya 2010, through legislative and other measures?

### **Justification/Significance of the Research**

The Climate Change (amendment) Act and the Carbon Credits Trading and Benefit Sharing Bill require every carbon offsetting project to be implemented through a community development agreement. The interests of indigenous communities where the carbon offsetting projects are to be conducted are, however, not well provided for by the Act and the proposed Bill.

This research aims to identify these gaps and propose legal solutions that will ensure equitable distribution and allocation of resources to all parties.

Also important to note is that the Act and the Bill do not define who or what constitutes 'adequate compensation' to an entire community. There is no provision for a benefit sharing formula amongst all the stakeholders. For investors or project developers, this could create some uncertainty about who to work with on their project. This might also lead to community members who lack knowledge of the projects having their rights violated. A delicate balance between the distribution of benefits to the indigenous communities and the return on investment to sponsors ought to be struck. This research will seek to provide solutions to these problems.

In order to verify that carbon credits are authentic and significantly lower emissions, carbon standards are essential. The Amendment Act mentions the use of carbon standards, however it doesn't indicate which carbon standard should be used for certification and accreditation. Determining the legitimacy and dependability of carbon credits becomes challenging as a result of this ambiguity. The practice of "greenwashing," in which the environmental advantages of a project or product are overstated or misrepresented, may also be made more likely by unclear carbon criteria.

## **Hypothesis**

Arising from the Climate Change (amendment) Act (2023) and the Carbon Credits Trading and Benefit Sharing Bill are legal gaps to ensure equitable distribution of resources between indigenous communities and project developers, despite the likelihood of indigenous communities being disproportionately affected by carbon offsetting projects. By identifying and addressing these legal gaps, it is hypothesised that implementing mechanisms for the meaningful participation and benefit - sharing of indigenous communities in carbon offsetting projects will contribute to a more equitable and sustainable approach to carbon offsetting in Kenya, and consequently the realisation of the right to clean and healthy environment, which includes the right to have the environment protected for the benefit of past, present and future generations.<sup>20</sup>

## **Theoretical Framework of the Research**

This research will apply the Public Goods Theory. Using this theory, the research will analyse the distributions of benefits and burdens of carbon credit projects in Kenya, focusing on the issues of equity, inclusion, and fairness among different social and economic groups. Public goods by definition are meant to be joint, equal and non - rivalrous, and non excludable. The notion of these central features of modern public goods is emphasised by Paul Samuelson.<sup>21</sup> One individual's consumption of a good does not prevent another individual from consuming the same good.<sup>22</sup>

When applied to community lands, especially in the context of carbon credits, the preservation of forests or other carbon sinks on community lands can be viewed as a public good. These lands generate benefits like carbon sequestration, which contributes to global climate mitigation, an outcome that benefits everyone.

However, the communities that manage and preserve these lands often do not receive a fair share of the economic benefits derived from carbon credits, despite their essential role in providing the public good. Public goods theory suggests that without proper incentives or compensation, there

---

<sup>20</sup> Article 42 Constitution of Kenya (2010)

<sup>21</sup> Cowen, T, Public goods definitions and their institutional context: A critique of public goods theory, vol 63, Review of social economy, No.1, 1985, 53-63.

<sup>22</sup> Cowen, T, Public goods definitions and their institutional context: A critique of public goods theory, vol 63, Review of social economy, No.1, 1985, 53-63.

may be under-provision of these goods, leading to the "free-rider problem," where others benefit without contributing to the cost of maintaining the resource.

A prominent critique of this theory, and one that may be applicable in our jurisdiction is the existence of a number of institutional and organisational barriers, most prominently a structure that hinders opportunities for meaningful public engagement, ambiguity in how distributive justice is defined, and lack of substantive requirements for potential inequalities to be addressed.<sup>23</sup>

The above problem notwithstanding, the research will employ the public goods theory of research so as to contribute to the ongoing discourse on refining and strengthening the environmental justice framework here in Kenya.

## **Literature review**

Nadaa Taiyab<sup>24</sup> in her work interrogated the role the voluntary offsetting may play in parties negating their carbon IV oxide emissions as well as catering to the distributive justice needs of indigenous communities in third world countries. Because project developers can avoid the bureaucratic processes and high transaction costs of the Kyoto Protocol's highly regulated Clean Development Mechanism (CDM), she believed that the voluntary carbon market may offer more opportunities to invest in small-scale projects with significant sustainable development benefits to local communities in low-income countries. The lives of millions of people living in indigenous communities in low-income nations could be impacted and transformed by the voluntary carbon market. Projects like planting fruit trees on significant areas of undeveloped public land, giving solar-powered cooking stoves and lighting lamps to impoverished people, and more can accomplish this.

Drawing from interviews with offset retailers and buyers from the private sector, government and nonprofit organisations, Nadaa found that the carbon markets had the potential to provide a new source of funding for sustainable development activities in the South. Buyers expressed two main concerns:

---

<sup>23</sup>Environmental Impact Assessment Review, Barriers and Opportunities to incorporating Environmental Policy Act,2022,97

<sup>24</sup>Gatekeeper series, The market for voluntary carbon offsets: A new tool for sustainable development?, 2005, 1-4.

- **Credibility:** Without a central verification and registration body and a set of enforceable standards, it is difficult for companies to assess the reliability, additionality and performance of offsets being provided.<sup>25</sup> Firms and governments, in particular, fear criticism from the civil society for investing in poor quality projects. Kenya, through the Climate Change (Amendment) Act has taken great strides with regards to credibility by mandating the establishment of a carbon registry to regulate the trade in carbon credits.<sup>26</sup> However, their efforts have fallen short of adopting a standard of determination of carbon credits, as well as providing a benefit sharing formula among the national government, county governments, indigenous communities and other stakeholders.
- **Availability of information:** There is little information available about the voluntary market, especially who the sellers are, the quality of their projects and who ought to benefit from the projects. Projects may offer benefits to local communities or involve local communities, but without detailed information, potential buyers find it difficult to know which to choose.<sup>27</sup> Occupiers of community lands are also oblivious of the projects that are taking place in their lands, and what benefits are owed to them from the projects. This too is a major problem in the carbon market here in Kenya. For instance, Lake Turkana Wind Power project in Kenya is the largest wind farm in Africa, yet many of the community members in Marsabit County are unaware of the benefits they ought to be receiving from the project.

Nkatha Murungi<sup>28</sup> in her work discourages the recent rush to realise the carbon trading markets in Kenya without sufficient legislation. The enabling regulations have not yet been presented to parliament, even though substantive law has been passed. Drawing from her work, establishing a carbon registry and other administrative functions may take time.

The recent rush by the Kenyan Legislature and Executive to structure the Kenyan carbon markets may be seen as an act by the Government of Kenya to hurriedly unlock access to green funding from foreign investors. This is due to the fact that the amendment of the Climate Change Act and the tabling of the Carbon Credits Trading and Benefit Sharing Bill 2023 came after the President

---

<sup>25</sup> Gatekeeper series, The market for voluntary carbon offsets: A new tool for sustainable development?, 2005, 1-4.

<sup>26</sup> Section 9(8) Climate Change (amendment) Act, 2023.

<sup>27</sup> Gatekeeper series, The market for voluntary carbon offsets: A new tool for sustainable development?, 2005, 1-4.

<sup>28</sup> Nkatha Muriungi, Kenya's carbon markets: The goose that lays the golden egg?, Jan 2024.

- Hon William Ruto - predicted that Carbon credits are expected to be Kenya's next big export. Additionally, the Africa Energy Forum in June 2023 and the first Africa Climate Summit in September 2023 were dominated by discussions for carbon markets.<sup>29</sup>

Further, Kenya's ambitious target of reducing greenhouse gas emissions by thirty two percent by 2030, as outlined in its updated NDCs, reflects the country's strong commitment to global climate goals.<sup>30</sup> However, this target may be overly ambitious given Kenya's status as a developing nation with limited financial and technological resources and may have been a contributing factor to this problem at hand. Kenya's updated Nationally Determined Contributions (NDCs) outline an ambitious plan to reduce greenhouse gas emissions, with the country set to finance only twenty one percent of its mitigation costs. The remaining seventy nine percent is expected to come from foreign funding sources.<sup>31</sup> While this reliance on external financing underscores Kenya's need for international support in its climate efforts, it also raises concerns about the potential for greenwashing. By depending heavily on foreign funding, Kenya may risk creating the impression of commitment without taking sufficient domestic responsibility for its climate goals. This approach could lead to questions about the genuine effectiveness and sustainability of its mitigation strategies, particularly if the promised foreign funds do not materialise or are insufficient to meet the ambitious targets.

The heavy reliance on foreign funding to cover seventy nine percent of its mitigation costs suggests that these goals may have been set without fully accounting for the country's domestic capabilities. This raises concerns that Kenya's climate commitments could be more aspirational than achievable, potentially leading to challenges in implementation and raising the spectre of greenwashing. By setting such high targets, Kenya risks overextending itself, which may hinder its ability to fulfil these promises effectively. The Climate Change (Amendment) Act and the Carbon Credit Trading and Benefit Sharing Bill were formulated in response to these Nationally

---

<sup>29</sup> Nkatha Muriungi, Kenya's carbon markets: The goose that lays the golden egg?, Jan 2024.

<sup>30</sup>

<https://leap.unep.org/en/countries/ke/national-legislation/kenyas-updated-nationally-determined-contributions-ndc-2020-2030> on 2nd September, 2024.

<sup>31</sup>

<https://leap.unep.org/en/countries/ke/national-legislation/kenyas-updated-nationally-determined-contributions-ndc-2020-2030>. On 2nd September, 2024.

Determined Contributions, and may in the long - run have the unintended negative consequences on the indigenous people of Kenya living in community lands.

Dr. Justin Kenrick<sup>32</sup> from the Forest People's Programme while speaking to the BBC called on the Government of Kenya to take into account the intergenerational equitable rights of the Ogiek people in Kenya and to stop evicting them from their ancestral homeland in the Mau Forest so as to secure the carbon markets. This was after hundreds of the Ogiek people were evicted from the Mau Forest by the government, in the name of 'protecting the environment'. Dr. Kenrick reiterated that the government by evicting the Ogiek people from the forest was motivated by offsetting companies who wanted the Government to assert control over the natural resource. Ms. Cladridge cited recent discussions between the Kenyan government and Blue Carbon, an offsetting company based in Dubai, as well as the government's announcement of further financing for forest conservation. Ms. Cladridge stated that the communities that have historically owned those areas and are knowledgeable about how to save them should do it, without blaming the firm for any wrongdoing.<sup>33</sup> Scores more stand to be denied access to community lands, which they have a legal claim to, without adequate compensation.

## **Research design and methodology**

This research will employ doctrinal research methodology. The research aims to analyse case law and statutory law in order to find and propose solutions to the existing legal gaps in this area of research. By employing the doctrinal research methodology the research will also be able to analyse the legal evolution and development of the existing framework in my area of research.

This approach will also provide a basis for the legal predictions that will be made in the course and at the tail end of the research.

The research will utilise both primary and secondary sources of information. The primary sources employed in this research will be: the Constitution of Kenya (2010), standard text books

---

<sup>32</sup> Marshall Claire, *Kenya's Ogiek people being evicted for carbon credits - lawyers*, BBC, 9th Nov 2023, <<https://www.bbc.com/news/world-africa-67352067>> on 1st March 2024.

<sup>33</sup> Marshall Claire, *Kenya's Ogiek people being evicted for carbon credits - lawyers*, BBC, 9th Nov 2023, <<https://www.bbc.com/news/world-africa-67352067>> on 1st March 2024.

and reference books, blogs, newspaper articles, working papers, case law and hansard reports. The secondary sources employed in the conduct of this research will primarily be interviews with experts in the environmental law field.

In addition to the doctrinal research methodology, this research will undertake a comparative case study on the carbon trading laws in Kenya and the already established legal framework governing the carbon trading in Norway, Brazil and Costa Rica. This is because Kenya and these countries have significant similarities in their legal systems. The similarities include but are not limited to the jurisdictions being governed by a constitution and the jurisdictions having a hierarchical judiciary, with the Supreme Court at the apex.

The research will, by comparing the laws in the four jurisdictions, aim to gain insight into the diverse approaches taken by the countries with varying levels of development. The research will aim to compare the substantive laws, legal procedures and legal culture of the four countries governing carbon markets. The comparative analysis will be at the micro level, and the research will look to compare specific legal provisions within the jurisdictions.

The research will also look into what Kenya can borrow from the legal framework of Norway, Brazil and Costa Rica, seeing as the four countries have fairly similar legal systems.

The comparative study will provide a robust foundation for recommending best practices that can be integrated into Kenya's carbon market regulations, particularly in areas such as benefit-sharing and community involvement.

## **Limitations**

Employing the use of doctrinal research methodology to research on this topic may pose a challenge due to scanty materials. For instance, the Carbon Credit Trading and Benefit Sharing Bill has not yet been adopted and therefore the amount of literary works (commentaries and critiques) is limited. Nonetheless, the study will utilise the available material to craft crucial hypotheses, adapting to the limitations in available resources. The study will also critically analyse parliamentary hansards so as to extract plausible arguments and arrive at workable solutions.

Seeing as the Bill has not yet been adopted, there haven't been any cases that have arisen from it. The research will therefore be limited in terms of access to case law on the same.

To cure the aforementioned problem, the research will encompass a comparative case study of the development of carbon markets between Kenya, Brazil, Norway and Costa Rica.

## **Chapter breakdown**

### **Chapter one: Introduction and background.**

This chapter lays out the background of the study and the statement of the problem of the study. This chapter will also outline the research objective, research questions, hypothesis and justification of the study. This chapter, in essence, will summarise the research.

### **Chapter two: The structure and functioning of carbon markets globally, regionally and in Kenya.**

This chapter will discuss the problem question of the research as well as the structure and functioning of carbon markets globally and locally in Kenya.

### **Chapter three: Legislative framework on carbon markets in Kenya.**

This chapter will be tied to chapter two. It will discuss the legislative and regulatory framework on carbon markets in Kenya. It will also analyse the theoretical framework that will be employed in this research. This chapter will analyse a number of legal instruments that regulate the carbon market in Kenya. Such include the Carbon Credit Trading and Benefit Sharing Bill 2023, The Climate Change (amendment) Act 2023 and the Constitution of Kenya 2010. This chapter will discuss the relevance of the current regulatory framework. The main instrument discussed in this chapter will be the Climate Change (amendment) Act 2023. These frameworks will be used to analyse the involvement of local communities in carbon trading and the distribution of benefits derived from carbon credits.

### **Chapter four: Community involvement and impact of the carbon offsetting projects on indigenous communities in Kenya.**

This chapter will assess the level of involvement of indigenous in the carbon offsetting projects and the impact the carbon offsetting projects have on the indigenous communities in Kenya. This

chapter will also analyse whether the right to clean and healthy environment as guaranteed by Article 42 of the Constitution of Kenya 2010 is achieved through carbon sequestration as envisioned by the Climate Change (amendment) Act and the Carbon Credit Trading and Benefits Sharing Bill..

#### **Chapter five: Legislative framework and policy recommendations.**

This chapter will explore possible legislative changes to ensure that all parties participating in the trade of carbon credits are adequately compensated. It will also discuss how the introduction of capacity-building programs and the establishment of community trust funds could lead to a more equitable distribution of resources from carbon trading.

#### **Chapter six: Conclusion and recommendations.**

This chapter will provide the findings of the study and give recommendations on legislative practices Kenya may adopt in the establishment of an equitable carbon market. It will highlight the potential for legislative reforms and community-based approaches to improve the overall impact of carbon trading on local communities.

### **Research timeline**

Submission of research proposal:

8th March 2024.

Submission of draft one of chapter two:

September 14th 2024.

Submission of final draft of chapter two:

14th September 2024.

Submission of draft one of chapter three:

24th September 2024.

Submission of final draft of chapter three:

27th September 2024.

Submission of draft one of chapter four:

7th October 2024

Submission of final draft of chapter four:

11th October 2024

Submission of draft one of chapter five:

21st October 2024

Submission of final draft of chapter five:

25th October 2024

Submission of draft one of chapter six:

8th November 2024

submission of final draft of chapter six:

15th November 2024

Submission of final draft dissertation:

13th December 2024

## **Bibliography**

### **List of legal instruments**

- Constitution of Kenya (2010)
- Paris Climate Agreement
- Kyoto Protocol.
- Climate Change (Amendment) Act (2023)
- Carbon Credits Bill (2023)

### **Journals**

- David Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature*, 1st edition, Oxford University Press.
- Richard G Newell, Carbon markets 15 years after Kyoto: Lessons learned, new challenges, 27(1), *The journal of Economic Perspectives*, 2013, pp 123-146

- Samuel Fankhauser, Designing Carbon Markets. Part 1: Carbon Markets in Time, (38) Energy Policy, 2010
- Robert D. Bullard, Toxic wastes and race at twenty: Why race still matters after all these years, Environmental Law, vol. 38, No. 2(2008)
- Alden L, Wily, The Community Land Act in Kenya. Opportunities and challenges for communities, 7(1) 1-25 (2018)
- 

### **Newspaper articles**

- Marshall Claire, Kenya's Ogiek people being evicted for carbon credits - lawyers, BBC, 9th Nov 2023, <<https://www.bbc.com/news/world-africa-67352067>>

### **Reports**

- Gatekeeper series, The market for voluntary carbon offsets: A new tool for sustainable development?, 2005.
- <https://www.refworld.org/reference/countryrep/mrgi/2018/en/120315>, on 2nd September, 2024.
- <https://leap.unep.org/en/countries/ke/national-legislation/kenyas-updated-nationally-determined-contribution-ndc-2020-2030>. On 2nd September, 2024.
- 

### **Self published articles**

- Nkatha Muriungi, Kenya's carbon markets: The goose that lays the golden egg?, IFC, Jan 2024.
- Peterdy Kyle, Carbon Credits, Corporate Finance Institute, 2023
- UNDP blog post, What are carbon markets and why are they important?, May 18 2022.
- Kimberly Mureithi, Commentary of the Climate Change (Amendment) Act, ALN, Carbon Market series,2023

### **Institutional authors**

- Ministry of Environment and Forestry, Updated Nationally Determined Contribution 2020, 24th Dec 2020

## **CHAPTER 2: From Global Frameworks to Local Action: Carbon Trading and Kenya's Emerging Market**

Climate change can be understood through three primary perspectives: financial,<sup>34</sup> anthropocentric,<sup>35</sup> and environmental.<sup>36</sup> Each of these viewpoints offers distinct solutions that can work in synergy to combat global climate issues. This research looks at climate change from a financial perspective, where the environmental costs of industrial activities are not factored into economic decisions. Carbon markets emerge as a solution within this framework, providing a mechanism to mitigate the cost of greenhouse gas emissions.

The emergence of carbon trading markets has transformed the landscape of climate change mitigation by enabling countries, companies, and individuals to trade carbon credits, fostering a market-driven approach to reducing greenhouse gas emissions.<sup>37</sup> This nuance is rooted in international climate agreements like the Kyoto Protocol<sup>38</sup> and the Paris Agreement.<sup>39</sup> Carbon markets now operate on multiple scales, from global to regional, and continue to evolve in response to growing environmental challenges. These markets, however, rely on robust legal and institutional frameworks to function effectively and achieve their desired environmental

---

<sup>34</sup> Nicholas Stern, *The Economics of Climate Change: The Stern Review*, Cambridge University Press, Cambridge, 2007, 89.

<sup>35</sup> Naomi Klein, *This Changes Everything: Capitalism vs. the Climate*, Simon & Schuster, New York, 2014, 52.

<sup>36</sup> Arne Næss, *Ecology, Community and Lifestyle: Outline of an Ecosophy*, Cambridge University Press, Cambridge, 1989, 67.

<sup>37</sup> Nicholas Stern, *The Economics of Climate Change: The Stern Review*, Cambridge University Press, Cambridge, 2007, 89.

<sup>38</sup> Article 12, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, UN Doc. FCCC/CP/1997/L.7/Add.1.

<sup>39</sup> Article 6, *Paris Agreement under the United Nations Framework Convention on Climate Change*, 12 December 2015, UN Doc. FCCC/CP/2015/L.9/Rev.1.

outcomes. In most of the regions globally and especially in the global south, such institutional frameworks are still taking shape

Globally, there is a wide range of approaches reflected in the architecture of carbon markets, ranging from the highly structured Emissions Trading Scheme (ETS) of the European Union<sup>40</sup> to the more flexible systems that are emerging in regions like India and Latin America. Carbon trading is still in its infancy in Africa, with nations such as South Africa and Kenya setting the standard for national carbon pricing schemes. A major hindrance to the development of carbon markets in Africa, however, is the lack of regional collaboration. Here in East Africa for instance, both Kenya and Rwanda are parties to the same regional block - the East African Community- yet they are both currently developing independent carbon markets.

Kenya is at a very crucial stage in the development of a working carbon market because of its wealth of renewable energy resources and resolute climate pledges.<sup>41</sup> The nation's participation in the Clean Development Mechanism (CDM) for international carbon trading has set the groundwork,<sup>42</sup> but shortcomings in the institutional and legal frameworks still impede development. We recently witnessed the rush to amend the 2016 Climate Change Act and tabling of the Carbon Credits Trading and Benefit Sharing Bill to tackle the aforementioned shortcomings. This chapter will evaluate the global and regional carbon trading frameworks, concentrating on their relevance to Kenya, and analyse the local context to determine the necessary measures for advancing Kenya's carbon trading market, with an emphasis on addressing equity and benefit-sharing concerns.

## **The Evolution of Carbon Markets Globally and Regionally**

One of the earliest milestones in establishing carbon markets was the adoption of the Kyoto Protocol in 1997, which established binding commitments for developed countries to reduce

---

<sup>40</sup> Ellerman A, Convery F and de Perthuis C, *Pricing Carbon: The European Union Emissions Trading Scheme*, Cambridge University Press, Cambridge, 2010, 75.

<sup>41</sup> Ministry of Environment and Forestry, *Updated Nationally Determined Contribution 2020*, 24th Dec 2020

<sup>42</sup> Kameri-Mbote P and Cullet P, *Kenya and Climate Change: The Clean Development Mechanism in Perspective*, IELRC Working Paper 2007-03, International Environmental Law Research Centre, Geneva, 2007, 25.

greenhouse gas emissions.<sup>43</sup> The Protocol introduced market-based mechanisms such as emissions trading,<sup>44</sup> the clean development mechanism (CDM)<sup>45</sup>, and joint implementation (JI).<sup>46</sup> These mechanisms allowed countries to achieve their emission reduction targets by trading emissions allowances or investing in emission-reduction projects in other countries. The CDM, in particular, enabled developed countries to fund projects in developing countries that reduced carbon emissions, generating tradable carbon credits in return. The Olkaria Geothermal Project in Kenya is one of the most significant Clean Development Mechanism (CDM) projects, contributing to both energy production and carbon emissions reduction.<sup>47</sup> The project developed with funding and technical support from various international partners and aims to harness geothermal energy from the Olkaria field in Kenya's Rift Valley. Geothermal power is a renewable energy source that significantly reduces reliance on fossil fuels, leading to lower greenhouse gas emissions. The Olkaria project, registered under the CDM, generates carbon credits, which are sold to developed countries to meet their emission reduction targets under the Kyoto Protocol.<sup>48</sup>

The Kyoto Protocol, however, fell short of achieving most of its set out targets and this led to the development of the Paris Agreement of 2015. The Paris Agreement further advances the role of carbon markets in mitigating climate change. Under Article 6, the Paris Agreement establishes a framework for cooperative approaches, which allows countries to meet their Nationally Determined Contributions (NDC's) by trading carbon credits through international market mechanisms.<sup>49</sup> This framework encourages countries to engage in emissions trading and collaborative climate actions, further contributing to the development of a global carbon market. The Sustainable Development Mechanism (SDM), a successor to the CDM, was also introduced

---

<sup>43</sup> Article 2, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, UN Doc. FCCC/CP/1997/L.7/Add.1.

<sup>44</sup> Article 17, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, UN Doc. FCCC/CP/1997/L.7/Add.1.

<sup>45</sup> Article 12, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, UN Doc. FCCC/CP/1997/L.7/Add.1.

<sup>46</sup> Article 6, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, UN Doc. FCCC/CP/1997/L.7/Add.1.

<sup>47</sup> Nyaboke J, *The Clean Development Mechanism in Kenya: A Case Study of the Olkaria Geothermal Project*, Unpublished LLM Dissertation, University of Nairobi, Nairobi, 2014.

<sup>48</sup> Nyaboke J, *The Clean Development Mechanism in Kenya: A Case Study of the Olkaria Geothermal Project*, Unpublished LLM Dissertation, University of Nairobi, Nairobi, 2014.

<sup>49</sup> Article 6, *Paris Agreement under the United Nations Framework Convention on Climate Change*, 12 December 2015, UN Doc. FCCC/CP/2015/L.9/Rev.1.

under the Paris Agreement to streamline emissions trading while promoting sustainable development.<sup>50</sup>

Several global organisations also oversee and regulate carbon markets. The United Nations Framework Convention on Climate Change (UNFCCC) provides the governance framework for international climate agreements, including carbon markets. The UNFCCC supervises mechanisms like the CDM, ensuring that projects meet specific criteria for emissions reductions.<sup>51</sup> Additionally, institutions such as the World Bank's Carbon Pricing Leadership Coalition<sup>52</sup> and the International Emissions Trading Association (IETA)<sup>53</sup> support the development of carbon pricing and trading systems by promoting best practices, facilitating cooperation, and advocating for the expansion of carbon markets.

Various carbon trading systems have been implemented across different regions, the most notable being the European Union Emissions Trading Scheme (EU ETS). The EU ETS, the world's largest carbon market, functions as a cap-and-trade system in which industries have emission limits and businesses can purchase or sell emission allowances in accordance with their requirements.<sup>54</sup> This system has been instrumental in reducing emissions across Europe and has provided a model for other countries to adopt carbon trading mechanisms. Ellerman and Convery note that the EU ETS has been effective in reducing emissions across the European Union and that the emissions in the sectors covered by the ETS have decreased by twenty one percent between 2005 and 2012, exceeding the EU's original targets for that period.<sup>55</sup> Martin has also praised the EU ETS for providing a market - based solution that allows industries to meet their emissions targets at the lowest possible cost.<sup>56</sup> The EU ETS has, however, been criticised for its

---

<sup>50</sup> Article 6(4), *Paris Agreement under the United Nations Framework Convention on Climate Change*, 12 December 2015, UN Doc. FCCC/CP/2015/L.9/Rev.1.

<sup>51</sup> *United Nations Framework Convention on Climate Change*, 'Clean Development Mechanism (CDM)' <https://cdm.unfccc.int/> on 7 October 2024.

<sup>52</sup> World Bank, *Carbon Pricing Leadership Coalition: Leadership Report 2021*, World Bank Group, Washington DC, 2021, 42.

<sup>53</sup> International Emissions Trading Association (IETA), *The Role of Carbon Pricing in Emissions Trading Systems: 2020 Status Report*, IETA, Geneva, 2020, 15.

<sup>54</sup> Ellerman A, Convery F and de Perthuis C, *Pricing Carbon: The European Union Emissions Trading Scheme*, Cambridge University Press, Cambridge, 2010, 75.

<sup>55</sup> Ellerman A, Convery F and de Perthuis C, *Pricing Carbon: The European Union Emissions Trading Scheme*, Cambridge University Press, Cambridge, 2010, 98.

<sup>56</sup> Martin R, de Preux L and Wagner U, *The Impact of the EU ETS on Regulated Firms: What Is the Evidence after Ten Years?*, 9 *Review of Environmental Economics and Policy* 1, 2015, 129.

selective applicability in various regions. Carbon leakage, which occurs when businesses move manufacturing to areas with laxer environmental rules to save money on compliance, is a result of the EU ETS's uneven implementation throughout the EU.<sup>57</sup> This has undermined the environmental integrity of the EU ETS by transferring emissions outside the EU, rather than reducing them globally. This problem can however be, in my opinion, mitigated by adopting global resolutions to curb this, for example by the United Nations General Assembly.

Another criticism that has been levelled against the EU ETS and the global carbon markets at large as Jaffe and Stavins point out is the volatility of carbon prices, which can fluctuate based on market demand, regulatory changes and economic conditions.<sup>58</sup> The volatility of the markets undermines the incentives for long - term emission reductions. It also undermines the predictability of returns for investors and consequently the benefits accruing to the communities in the areas the projects are taking place.

Closer home here in Africa, the African Union plays a significant role in shaping carbon trading policies across the continent by providing frameworks and facilitating cooperation between member states to participate in global and regional carbon markets. The AU's influence is seen primarily through initiatives like the African Carbon Markets Initiative (ACMI), which was launched at COP27 in 2022 and aims to significantly expand Africa's carbon credit production and ensure that the benefits are distributed equitably, particularly to local communities.<sup>59</sup> The ACMI has set ambitious targets to produce 300 million carbon credits annually by 2030 and 1.5 billion credits annually by 2050.<sup>60</sup> One of the core principles of ACMI is ensuring that the revenue from carbon credits is distributed transparently and equitably across the different regions and areas the projects are to take place.<sup>61</sup> Although the ACMI has much potential, it is yet to be domesticated and actualised by a majority of the jurisdictions in Africa. The AU's emphasis on

---

<sup>57</sup> Vivid Economics, *Carbon Leakage Prospects under Phase III of the EU ETS and Beyond*, Report for the UK Government, London, 2013, 33.

<sup>58</sup> Jaffe J, Stavins R and Schmalensee R, *Linking Tradable Permit Systems: A Key Element of Emerging International Climate Policy Architecture*, 36 Ecology Law Quarterly 4, 2010, 789.

<sup>59</sup> African Carbon Markets Initiative, *Africa Carbon Markets Initiative: Roadmap Report 2022*, ACMI, 2022, 18—available at <https://www.africacarbonmarkets.org> on 7 October 2024

<sup>60</sup> African Carbon Markets Initiative, *Africa Carbon Markets Initiative: Roadmap Report 2022*, ACMI, 2022, 18—available at <https://www.africacarbonmarkets.org> on 7 October 2024

<sup>61</sup> African Carbon Markets Initiative, *Africa Carbon Markets Initiative: Roadmap Report 2022*, ACMI, 2022, 18—available at <https://www.africacarbonmarkets.org> on 7 October 2024

high integrity and equitable carbon markets aligns with Kenya's development of its own carbon trading frameworks like the Climate Change (amendment) Act and the Carbon Credits and Benefit Sharing Bill. The level of stakeholder engagement on the two aforementioned legislations is, however, questionable. This will be tackled in the next chapter.

## **The Carbon Markets in Kenya**

The carbon markets framework here in Kenya is largely framed around Kenya's Nationally Determined Contributions (NDC's) in line with the Paris Agreement. Kenya has committed to reducing its greenhouse gas emissions by 32% by 2030, as previously mentioned in chapter one of this research.<sup>62</sup> To achieve this, the country is exploring both market and non-market mechanisms as outlined in Article 6 of the Paris Agreement.<sup>63</sup> This is done by leveraging carbon trading to offset emissions and generating carbon credits through various sectors such as forestry, agriculture, energy, and transport. Over the past one year, Kenya has seen various actions geared towards achieving these targets such as the receiving of monetary grants by BasiGo, an electric public transport vehicle manufacturer, and an influx of electric public transport vehicles into the market as a result of the same, and the implementation of National Tree Planting Days in the calendar year.

Key policies being developed include the Climate Change (Amendment) Act, 2023 as mentioned in chapter one of this research, which provides a framework for integrating carbon markets into Kenya's legal landscape. The amendment expands the mandate of the National Climate Change Action Plan (NCCAP) to include measures such as identifying greenhouse gas emission profiles, developing a carbon credit project pipeline, and ensuring compliance with international climate commitments.<sup>64</sup>

In Kenya, the National Environment Management Authority (NEMA) is responsible for enforcing environmental regulations, including conducting environmental and social impact assessments (ESIA's) for carbon trading projects.<sup>65</sup>

---

<sup>62</sup> Government of Kenya, *National Climate Change Action Plan (NCCAP) 2018–2022*, Ministry of Environment and Forestry, 2018, 45.

<sup>63</sup> Government of Kenya, *National Climate Change Action Plan (NCCAP) 2018–2022*, Ministry of Environment and Forestry, 2018, 45.

<sup>64</sup> Section 13, *Climate Change (amendment) Act, 2023*

<sup>65</sup> Bowmans, *Kenya: Insights on the Climate Change (Carbon Markets) Regulations, 2024*, Bowmans, 2024, available at <https://bowmanslaw.com> on 7 October 2024.

Kenya's carbon market framework is currently facing several significant challenges. One key issue is the lack of a clear benefit-sharing mechanism for indigenous and local communities. While carbon trading projects can bring substantial financial rewards through carbon credits, the distribution of these benefits often remains opaque and not clearly defined in the upcoming frameworks. Local communities, particularly those who live in forested areas such as the Ogiek, or those whose land is directly involved in carbon projects such as the Maasai, do not always receive a fair share of the proceeds, despite their essential role in the success of these projects. The very existence of some of these peoples cultures and livelihoods is threatened by the implementation of these projects. We recently witnessed the destruction of Ogiek villages and their eviction from the Mau Forest, all in a bid to ensure the government and other private stakeholders get to participate in these carbon trading activities.<sup>66</sup> There's therefore a gap in equitable benefit-sharing, which threatens to undermine community engagement and support for carbon trading initiatives. The next chapter of this research will delve more deeply into this matter. Lastly, governance and transparency concerns continue to hinder the potential of Kenya's carbon markets. There is a need for clearer regulations and institutional oversight to ensure that carbon credits are traded fairly and that the projects uphold environmental and social standards.

This chapter has examined the more general legislative frameworks and institutional difficulties in Kenya's carbon markets. The focus now turns to the local communities, in the next chapter, whose involvement and engagement are essential to the programs' success.

In carbon offset initiatives, local people are frequently the primary stakeholders, especially when it comes to reforestation, renewable energy, and sustainable land use. They are more than just participants; they are essential to the implementation of practical activities that guarantee the integrity and efficacy of carbon offset programs.<sup>67</sup> The degree of their involvement varies greatly, though. Their degree of participation is greatly influenced by elements like awareness, capacity building, and the existence of benefit-sharing systems. In many cases, communities are involved

---

<sup>66</sup> Marshall Claire, Kenya's Ogiek people being evicted for carbon credits - lawyers, BBC, 9th Nov 2023, <<https://www.bbc.com/news/world-africa-67352067>> on 1st March 2024.

<sup>67</sup> Ngoti I, *The role of sense of ownership in rural community mini-grid management: Qualitative case study from Tanzania*, Energy, Sustainability and Society, 2024, 14— Available at <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-024-00496-7> Accessed on 3rd Dec 2024.

in the initial stages but may not have a consistent or decision-making role throughout the project lifecycle.<sup>68</sup>

In Kenya, Initiatives such as carbon trading are in most cases carried out in areas where the land tenure is community owned land. Such initiatives have significant social and economic effects on these communities. On the one hand, by encouraging community-driven development, expanding livelihood options, and supporting sustainable practices that enhance general well-being, effective projects can result in empowerment. Carbon credit revenues, for example, can be used to assist education, enhance healthcare, and finance local infrastructure projects.<sup>69</sup> However, there are worries about the potential of marginalisation and the fair sharing of benefits, particularly if communities are not sufficiently informed or included in decision-making processes.<sup>70</sup>

Chapter three will delve deeper into these concerns posed, examining the current extent of community engagement in Kenya's carbon offset projects. With an emphasis on case studies and actual situations, it will examine both the advantages and disadvantages. This chapter will seek to demonstrate the vital significance of developing inclusive and equitable carbon trading systems that genuinely benefit the communities at the center of these projects by examining the social and economic results.

---

<sup>68</sup> Walker G et al., *Community Acceptability and Social Inclusion in Renewable Energy Projects*, Energy, Sustainability and Society, 2021, 19—available at <https://energysustainsoc.biomedcentral.com> [Accessed 7 October 2024].

<sup>69</sup> Walker G et al., *Community Acceptability and Social Inclusion in Renewable Energy Projects*, Energy, Sustainability and Society, 2021, 19—available at <https://energysustainsoc.biomedcentral.com> [Accessed 7 October 2024].

<sup>70</sup> Ngoti I, *The role of sense of ownership in rural community mini-grid management: Qualitative case study from Tanzania*, Energy, Sustainability and Society, 2024, 14— Available at <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-024-00496-7> Accessed on 3rd Dec

## **CHAPTER 3: Voluntary Carbon Markets and Social Justice: Best Practices for Realising Equitable Resource Distribution in Kenya.**

In the previous chapter, this research examined the global and local policy frameworks shaping carbon markets, focusing on the mechanisms of carbon credit trading. Building on this, Chapter 3 will now delve deeper into the human dimension of carbon trading and explore the participation of local communities in these projects. The focus will be on how Kenya's strategy for guaranteeing that the proceeds from the carbon market directly benefit local communities may be informed by international best practices. By looking at these social and economic results, the chapter will show how participatory frameworks and transparent governance can support the right to a clean and healthy environment guaranteed by Article 42 of the 2010 Kenyan Constitution.<sup>71</sup>

### **Significance of the Right to Clean and Healthy Environment as Enshrined in the Constitution of Kenya in Relation to Voluntary Carbon Markets**

Enshrined in Article 42 of the Constitution of Kenya 2010 is the right to a clean and healthy environment for all.<sup>72</sup> This right guarantees not only the protection of natural resources, but also mandates the government and relevant stakeholders to implement measures that safeguard the environment for the benefit of present and future generations.<sup>73</sup> As the court also noted in *Amina Said Abdalla and two others V County Government of Kilifi*, the article aligns with Kenya's broader environmental goals, emphasising sustainable development, equitable resource distribution, and participatory governance in environmental management.<sup>74</sup>

Okoth Ogendo notes that constitutional provisions serve as a foundation for environmental legislation, ensuring that environmental rights are not only recognised but also actionable

---

<sup>71</sup> Article 42, Constitution of Kenya (2010)

<sup>72</sup> Article 42, Constitution of Kenya (2010)

<sup>73</sup> *Amina Said Abdalla & 2 others v County Government of Kilifi & 2 others* [2017] eKLR.

<sup>74</sup> *Amina Said Abdalla & 2 others v County Government of Kilifi & 2 others* [2017] eKLR.

through policy frameworks.<sup>75</sup> In essence, these constitutional provisions serve as the bedrock for environmental law and policy and they provide a strong legal foundation for protecting the environment and ensuring that environmental rights are not just some abstract concepts, but are real and enforceable. Bulkeley et al argue that voluntary markets can empower local communities by providing financial incentives for conservation and sustainable practices. However, they caution that for VCMs to truly support environmental rights, they must include transparent benefit-sharing mechanisms and ensure community participation.<sup>76</sup> By addressing these aforementioned factors, VCM's can become a powerful tool for sustainable community development and environmental conservation.

Bumpus and Liverman further highlight that VCM's have the potential to contribute to environmental sustainability and social equity when they are well regulated and aligned with national goals. They emphasize the necessity of precise legal structures to prevent local populations from being exploited and guarantee that the advantages of carbon trading are shared fairly.<sup>77</sup> The situation in Kenya, however, does not provide for adequate legislation of Voluntary Carbon Markets. The government of Kenya introduced VCM's into the Kenyan market through the Climate Change (amendment) Act in late 2023<sup>78</sup> without having first put enough regulations in place. There is currently a bill tabled before parliament - the Carbon Credits Trading and Benefit Sharing Bill, that is meant to regulate the field, but it is yet to be passed and assented into law. That notwithstanding, the provisions of the bill appear to be inadequate to regulate the voluntary carbon markets in Kenya. This research will delve into this issue in the next chapter. This lack of a robust regulatory environment poses significant risks, as it can lead to the negative exploitation of the local communities in Kenya, environmental degradation and ineffective carbon reduction. The premature and, as it appears, rushed implementation of voluntary carbon markets in the country without a clear regulatory framework raises concerns over the long-term sustainability and integrity of these markets. To many the rushed implementation of the market

---

<sup>75</sup>Okoth Ogendo, *Constitutions without Constitutionalism: Reflections of an African Paradox*, in Douglas Greenberg(eds) in *Constitutionalism and Democracy: Transitions in the Contemporary World*, 2nd ed, Oxford Academic, New York, 1993, 65-82.

<sup>76</sup>Bulkeley H, Carmin J, Castán Broto V, Edwards G, and Fuller S, *Climate Justice and Community Participation in Carbon Projects*, Global Environmental Change, 2013, 62.

<sup>77</sup>Bumpus A and Liverman D, *Accumulation by Decarbonisation and the Governance of Carbon Offsets*, Economic Geography, 2008, 55.

<sup>78</sup>Section 23, Climate Change (amendment) Act, 2023

would appear to have been done so as to unlock potential climate funding from international investors and lending institutions, a move that could leave Kenya exposed to greenwashing.<sup>79</sup> A comprehensive legal framework is essential to ensure that voluntary carbon markets contribute to the overall environmental sustainability and social equity while safeguarding the rights of all stakeholders involved.

### **Conceptual framework and the importance of equitable distribution in the carbon markets context**

The sharing of benefits resulting from the usage of resources, whether or not they are commercial, is referred to as benefit sharing and equitable distribution. These benefits might include both monetary and non-monetary returns.<sup>80</sup> From the foregoing and in our context, equitable benefit-sharing refers to the fair and transparent allocation of resources, revenues, and benefits derived from projects such as carbon offset initiatives. It ensures that stakeholders - particularly local and indigenous communities - receive a fair share of the economic and non-economic benefits generated by carbon trading activities. This concept is underpinned by principles of social equity, inclusivity, and sustainable development.<sup>81</sup>

Equitable benefit-sharing is critical to the success and sustainability of carbon markets. According to Bulkeley, equitable distribution fosters trust and acceptance among stakeholders, particularly communities directly impacted by carbon offset projects.<sup>82</sup> Without fairness in benefit allocation, projects risk opposition and may fail to achieve long-term environmental goals. Kenya has witnessed this in a number of instances, such as the Kinangop Wind Power Project, which failed mainly due to the failure by the investors to properly engage community members in their role and benefit sharing in the project.<sup>83</sup> The community residents of Kinangop opposed the project and the result was a total collapse of the project and wastage of colossal

---

<sup>79</sup> Arko. T, *Carbon Markets and the New Scramble for African Land*, The Elephant, 2024.

<sup>80</sup> Schroeder. D, *Benefit Sharing: It's Time for a Definition*, Vol 33, Journal of Medical Ethics, No.4, 2007, 209.

<sup>81</sup> Amina Said Abdalla & 2 others v County Government of Kilifi & 2 others [2017] eKLR.

<sup>82</sup> Bulkeley H, Carmin J, Castán Broto V, Edwards G, and Fuller S, *Climate Justice and Community Participation in Carbon Projects*, Global Environmental Change, 2013, 65.

<sup>83</sup> Kamau. J, *Why Sh15 Billion Kinangop Power Mill Burnt Out Like A Candle in the Wind*, Nation Media Group, 7 Jul 2018,

<https://nation.africa/kenya/news/why-sh15-billion-kinangop-power-mill-burned-out-like-a-candle-in-the-wind-64286> , [Accessed on 8th December 2024]

amounts of money.<sup>84</sup><sup>85</sup> Moreover, equitable benefit-sharing aligns with the constitutional guarantees in Kenya, such as Article 42, which emphasises the protection and sustainable use of the environment for the benefit of both present and future generations.<sup>86</sup>

Bumpus and Liverman argue that equitable sharing of carbon revenues can help mitigate power imbalances between project developers and communities. They stress that fairness in benefit distribution is not only a moral imperative but also a practical necessity for ensuring community buy-in and participation.<sup>87</sup> The acceptability of the projects in their communities will continue to suffer from intentional rules-based hurdles to citizen participation, inequalities in the current power structures, and a lack of transparency in government decision-making.<sup>88</sup> Failure to remove barriers to participation in community projects may lead to social conflict and hinder the acceptance of the projects. If adequate procedural laws with regards to carbon trading and Voluntary Carbon Markets are not implemented, the carbon trading projects in Kenya may not be as successful. By ensuring that citizens have opportunities to participate, have their concerns addressed and feel that they have been treated fairly, policymakers can enhance public acceptance of carbon trading projects on their lands.<sup>89</sup> Ultimately, the success of projects implemented on community lands in Kenya depends on the active engagement of community members.

---

<sup>84</sup> Kamau. J, *Why Sh15 Billion Kinangop Power Mill Burnt Out Like A Candle in the Wind*, Nation Media Group, 7 Jul 2018, <https://nation.africa/kenya/news/why-sh15-billion-kinangop-power-mill-burned-out-like-a-candle-in-the-wind-64286> , [Accessed on 8th December 2024]

<sup>85</sup> *Moffat Kamau & 9 others V Aeolus Kenya Ltd & 9 others*, Constitutional Petition 13 of 2015 (Environment and Land Court at Nakuru), [2016] eKLR

<sup>86</sup> Article 42, Constitution of Kenya, 2010.

<sup>87</sup> Bumpus A and Liverman D, *Accumulation by Decarbonisation and the Governance of Carbon Offsets*, Economic Geography, 2008, 60.

<sup>88</sup> Lennon. B, Dunphy. N, *Community Acceptability and the Energy Transition: A Citizen's Perspective*, Energy, Sustainability and Society, 2019, 8 — Available at <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-019-0218-z#Sec14> [Accessed on 9th December 2024]

<sup>89</sup> Lennon. B, Dunphy. N, *Community Acceptability and the Energy Transition: A Citizen's Perspective*, Energy, Sustainability and Society, 2019, 8 — Available at <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-019-0218-z#Sec14> [Accessed on 9th December 2024]

Equitable distribution addresses systemic inequalities by ensuring that marginalised groups, such as indigenous and rural communities, receive tangible benefits from carbon markets.<sup>90</sup> This promotes social justice by acknowledging the critical role these communities play in preserving ecosystems and reducing emissions. According to Okoth-Ogendo, equitable frameworks in environmental governance are essential for balancing developmental priorities with human rights.<sup>91</sup>

Fair benefit-sharing empowers communities by providing them with financial resources, technical training, and decision-making roles in carbon offset projects. This empowerment enables communities to become active participants rather than passive beneficiaries. Bulkeley et al emphasise that empowerment is critical for fostering resilience and capacity-building in local communities.<sup>92</sup> Equitable carbon markets contribute to the realisation of environmental rights, as outlined in Article 42 of the Constitution of Kenya.<sup>93</sup> All these underscore the importance of integrating rights-based approaches into carbon market governance.

### **Case Studies from Global Models For Sustainable Carbon Trading**

This research will employ case studies from Norway, Brazil and Costa Rica for their relevance to Kenya's challenges in balancing sustainable development, conservation and equitable benefit-sharing. While the legal systems vary - Kenya operates under a common law system,<sup>94</sup> Norway follows civil law, and Brazil<sup>95</sup> and Costa Rica<sup>96</sup> adopt Roman-Germanic traditions - all uphold environmental rights. Kenya's Article 42 of the Constitution, which guarantees the right

---

<sup>90</sup> Bulkeley H, Carmin J, Castán Broto V, Edwards G, and Fuller S, *Climate Justice and Community Participation in Carbon Projects*, Global Environmental Change, 2013, 65.

<sup>91</sup> Okoth Ogendo, *Constitutions without Constitutionalism: Reflections of an African Paradox*, in Douglas Greenberg(eds) in *Constitutionalism and Democracy: Transitions in the Contemporary World*, 2nd ed, Oxford Academic, New York, 1993, 65-82.

<sup>92</sup> Bulkeley H, Carmin J, Castán Broto V, Edwards G, and Fuller S, *Climate Justice and Community Participation in Carbon Projects*, Global Environmental Change, 2013, 65.

<sup>93</sup> Article 42, Constitution of Kenya, 2010.

<sup>94</sup> Section 3, *Judicature Act*, 1967.

<sup>95</sup> Perlingeiro R, *Brazil's Administrative Justice System in a Comparative Context*, *Revista de Direito Internacional*, 2015, 12(2), 65-79, available at <https://www.scielo.br/rj/rinc/a/7Zz5BNHBBX6XRq67VB4hjHF/?lang=en> [Accessed 17th January 2025].

<sup>96</sup> OECD, *Competition Law and Policy in Costa Rica: A Peer Review 2014*, Organisation for Economic Co-operation and Development, 2014, available at [https://www.oecd-ilibrary.org/competition-law-and-policy-in-costa-rica-a-peer-review-2014\\_7289d80a-en.pdf](https://www.oecd-ilibrary.org/competition-law-and-policy-in-costa-rica-a-peer-review-2014_7289d80a-en.pdf) [Accessed 17th January 2025].

to a clean and healthy environment,<sup>97</sup> parallels Norway's Finnmark Act, Brazil's laws supporting the Amazon Fund and Costa Rica's Forestry Law underpinning the PES program. These nations also address historical land-use challenges, such as Norway's recognition of Sami rights,<sup>98</sup> Brazil's fight against deforestation<sup>99</sup> and Costa Rica's reforestation efforts,<sup>100</sup> providing valuable lessons for Kenya.

Norway stands out globally for its progressive approach to integrating indigenous rights into environmental and carbon trading policies in a way that upholds the principles of justice and equity for indigenous communities such as the Sami community. The Nussir copper mine in Norway, the Markbygden wind farm in Sweden, and the Arctic Railway project in Finland highlight green transition projects' adverse effects on Sami livelihoods, as highlighted in a research by Pellennec.<sup>101</sup> The Norwegian government recognises that climate mitigation efforts including carbon offset projects must address the unique needs and rights of indigenous populations, who more often than not face disproportionate impacts from environmental policies.<sup>102</sup> Kenya could borrow a leaf from the Norwegian benefit sharing model already in place in its attempt to establish a concrete and credible Voluntary Carbon Market.

In carbon trading projects involving reforestation on Sami lands, Norway has implemented mechanisms to ensure that the benefits derived from carbon credits flow directly to Sami communities. The state adheres to the principle of free, prior, and informed consent (FPIC), requiring extensive consultations with Sami representatives before initiating any reforestation projects.<sup>103</sup> These consultations not only seek approval but also ensure Sami participation in the decision-making process, allowing their traditional knowledge on environmental conservation to

---

<sup>97</sup> Article 42, *Constitution of Kenya, 2010*.

<sup>98</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 25.

<sup>99</sup> Marcovitch J and Pinsky V, *Policy Innovation for Sustainable Development: The Case of the Amazon Fund*, Sustainability, 2024, 9

<sup>100</sup> Wunder S, *Can payments for environmental services reduce deforestation and forest degradation?*, European Forest Institute, 2009, 213.

<sup>101</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 1-5.

<sup>102</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 1-5.

<sup>103</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 25.

guide project implementation. In order to facilitate benefit-sharing, Norway channels revenues from carbon credits into community development programs tailored to Sami needs. Such projects include investment in education, health, preserving reindeer herding practices, promoting Sami cultural heritage and infrastructure projects such as construction of access roads within the community lands.<sup>104</sup> Additionally, Sami governance structures, such as the Sami Parliament known as Samediggi, are involved in monitoring and managing benefit flows to ensure transparency and accountability in the implementation of the projects.<sup>105</sup>

Norway's policy framework also incorporates biodiversity safeguards to protect the unique ecosystems of Sami territories. By aligning reforestation efforts with Sami land-use traditions, Norway ensures that these projects do not disrupt local ecosystems or violate Sami spiritual and cultural ties to their lands. Such an approach underscores the importance of viewing indigenous participation as not just a procedural step but as a substantive component of climate justice. In Kenya, the complete opposite is taking place. Recently the Ogiek community, one of the last indigenous hunter-gatherer communities in Kenya, was evicted from their ancestral home in the Mau forest in a bid to bring more land under forestation and reduce human activity in the forest. Their property and homes were destroyed and inadequate compensation was given.<sup>106</sup> This move by the Kenyan government left many of the Ogiek peoples homeless and landless, and interfered with their livelihoods, spiritual and cultural ties to the forest. In the new carbon markets in Kenya, appropriate mechanisms that prioritise community consent, participation and benefit-sharing ought to be put in place. The Norway case study provides a balanced approach to reforestation and carbon trading that respects and uplifts indigenous communities.

Moreover, Kenya's current regulatory efforts fail to provide clear guidance on community engagement and institutional responsibilities. For instance, the Natural Resources (Benefit Sharing) Bill, 2018, aimed to create a system for equitable distribution of benefits among the national government, county governments and local communities. Included in the list of natural

---

<sup>104</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 25.

<sup>105</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 25.

<sup>106</sup> Marshall Claire, *Kenya's Ogiek people being evicted for carbon credits - lawyers*, BBC, 9th Nov 2023, <<https://www.bbc.com/news/world-africa-67352067>> on 1st March 2024.

resources under Section 3 of the bill is sunlight, wind, geothermal resources, surface and underground water and forests.<sup>107</sup> The Bill, if enacted, would therefore be applicable to carbon credits trading. However, this bill has not been enacted into law, leaving gaps in the legislative framework for benefit sharing in Kenya. These gaps have resulted in companies like Base Titanium, which operates in Kwale County, implementing their own benefit-sharing initiatives. Base Titanium has engaged with local communities through Community Development Agreements (CDAs) to address community concerns and share benefits from mining activities.<sup>108</sup> However, reports indicate that some host communities, such as those in Nguluku and Bwiti, continue to experience socio-economic challenges and feel that they have not benefited equitably from the mining operations.<sup>109</sup> Criticisms include inadequate community involvement in project design and implementation, insufficient mitigation of environmental and social impacts and delays in royalty remittances from the national government to local entities.<sup>110</sup>

The year 2008 saw the establishment of the Amazon Fund in Brazil, which is an initiative aimed at combating deforestation and promoting sustainable development in the Brazilian Amazon.<sup>111</sup> The fund is currently active and its success is largely attributed to its transparent governance structure and the participatory decision-making processes that actively involve local communities. The Amazon Fund is managed by the Brazilian Development Bank, which ensures transparency through regular audits, public reports and a clear allocation of resources. This openness has been instrumental in building trust among stakeholders and attracting international donors for example the Norwegian and German governments.<sup>112</sup>

---

<sup>107</sup> Section 3, *Natural Resources (Benefit Sharing Bill)*, 2018

<sup>108</sup> Business & Human Rights Resource Centre, *Report Claims Titanium Mining Host Community Has Not Benefited From Mining Operations*, Business & Human Rights Resource Centre, 2023, available at <https://www.business-humanrights.org/en/latest-news/report-claims-titanium-mining-host-community-has-not-benefited-from-mining-operations/> [Accessed 17th January 2025].

<sup>109</sup> Business & Human Rights Resource Centre, *Report Claims Titanium Mining Host Community Has Not Benefited From Mining Operations*, Business & Human Rights Resource Centre, 2023, available at <https://www.business-humanrights.org/en/latest-news/report-claims-titanium-mining-host-community-has-not-benefited-from-mining-operations/> [Accessed 17th January 2025].

<sup>110</sup> Business & Human Rights Resource Centre, *Report Claims Titanium Mining Host Community Has Not Benefited From Mining Operations*, Business & Human Rights Resource Centre, 2023, available at <https://www.business-humanrights.org/en/latest-news/report-claims-titanium-mining-host-community-has-not-benefited-from-mining-operations/> [Accessed 17th January 2025].

<sup>111</sup> Marcovitch J and Pinsky V, *Policy Innovation for Sustainable Development: The Case of the Amazon Fund*, Sustainability, 2024, 9

<sup>112</sup> Marcovitch J and Pinsky V, *Policy Innovation for Sustainable Development: The Case of the Amazon Fund*, Sustainability, 2024, 9

A distinct feature of the Amazon Fund is its commitment to involving local communities, including indigenous peoples in decision-making processes during implementation of green projects.<sup>113</sup> The Fund's Guidance Committee includes representatives from federal and state governments, civil society and indigenous organisations, ensuring that diverse perspectives are considered in project selection and implementation.<sup>114</sup> This inclusive approach empowers local communities, respects their traditional knowledge and aligns projects with their everyday needs. According to a research by Horns, the Amazon Fund has supported numerous projects that currently promote sustainable livelihoods, strengthen environmental governance and enhance the capacity of local communities to manage their natural resources.<sup>115</sup> By 2021, the Fund had disbursed over one point two billion USD to more than one hundred projects, contributing to a significant reduction in deforestation rates in the Amazon region.<sup>116</sup> The fund's colossal impact was made possible by the participatory nature of the implementation of the fund. The authorities ensured that the project was culturally appropriate and sound before implementation among the indigenous communities in Brazil.

The Amazon Fund in Brazil is proof that transparent governance and participatory decision making is crucial to the success of environmental initiatives, all while ensuring equitable benefit sharing among stakeholders from the projects - more so the indigenous communities. In Kenya, the regulatory framework for benefit sharing in the carbon markets remains vague, with the implementation of projects before the appropriate regulatory framework is in place. While there is progress through the Climate Change Act, significant gaps exist. For instance, unlike in Brazil, Kenya lacks a standardised benefit sharing formula leaving ambiguity in how proceeds from the carbon offsetting projects will be distributed. The indigenous communities on whose land the projects will take place stand to be the greatest losers.

Further in Costa Rica, their Payment for Environmental Services (PES) program established in 1997, is viewed globally as a pioneering model that effectively integrates carbon markets with

---

<sup>113</sup> Pereira L, *Towards a Transformative Governance of the Amazon*, Global Policy, 2022, 13

<sup>114</sup> Pereira L, *Towards a Transformative Governance of the Amazon*, Global Policy, 2022, 13

<sup>115</sup> Horn C, *The Amazon Fund: Pathways to Social Inclusion*, Friedrich-Ebert-Stiftung, 2023, 20

<sup>116</sup> Horn C, *The Amazon Fund: Pathways to Social Inclusion*, Friedrich-Ebert-Stiftung, 2023, 20

community incentives for conservation. In order to support ecosystem services including carbon sequestration, biodiversity conservation, water control and scenic beauty, the program pays landowners to maintain forest cover.<sup>117</sup> Most farmers in Costa Rica adopt climate smart agricultural practices such as agro forestry and all parties end up benefiting from the initiatives.<sup>118</sup>

The Payment for Environmental Services(PES) program aligns with global carbon market mechanisms by monetising the carbon sequestration services provided by forests. Landowners receive payments funded through various sources including a fuel tax and international contributions, effectively linking domestic conservation efforts with global climate change mitigation strategies.<sup>119</sup> By providing financial incentives directly to landowners and local communities, the program encourages the preservation of natural resources. This approach not only supports environmental goals, but also contributes to local economic development. The initiative's design model recognises the importance of community members' involvement, marginalised people's involvement and incorporates both small landowners and owners of large tracts of land alike.<sup>120</sup> Studies indicate that the PES program has played an important role in reversing deforestation trends, with forest cover increasing from approximately twenty one percent in the 1980s to over fifty percent in recent years.<sup>121</sup> Additionally, the program has contributed to poverty reduction in rural areas by providing a stable income source that is linked to sustainable land and environmental management practices.<sup>122</sup> In Kenya, current legislation, such as the Carbon Credit Trading and Benefit Sharing Bill, 2023 and amendments to the Climate Change Act, are steps toward addressing this gap but fall short in key areas. Unlike Costa Rica's PES program, which includes well-defined mechanisms for financial disbursements and targeted community incentives, Kenya's framework does not yet establish a standardised

---

<sup>117</sup> Wunder S, *Can payments for environmental services reduce deforestation and forest degradation?*, European Forest Institute, 2009, 213.

<sup>118</sup> Wunder S, *Can payments for environmental services reduce deforestation and forest degradation?*, European Forest Institute, 2009, 213.

<sup>119</sup> Wunder S, *Can payments for environmental services reduce deforestation and forest degradation?*, European Forest Institute, 2009, 213.

<sup>120</sup> Pagiola S, *Payments for Environmental Services in Costa Rica*, *Ecological Economics*, 2008, 65(4), 712-724.

<sup>121</sup> Sanchez. G, *Costa Rica's Payment for Environmental Services Program: Intention, Implementation and Impact*, 2007, 21(5), 1165-1173

<sup>122</sup> Sanchez. G, *Costa Rica's Payment for Environmental Services Program: Intention, Implementation and Impact*, 2007, 21(5), 1165-1173

benefit-sharing formula or robust monitoring systems. This leaves ambiguity in how revenues from carbon trading will be distributed, often disadvantaging indigenous groups such as the Ogiek and Maasai, who depend on forest ecosystems for their livelihoods.

This chapter of the research has delved into the critical role voluntary carbon markets can play in promoting social justice and equitable resource distribution in Kenya. Through a review of Kenya's constitutional guarantees under Article 42, this analysis underscores that a clean and healthy environment is not only a right but also a responsibility shared across generations.<sup>123124</sup> The chapter highlighted the importance of equitable benefit-sharing mechanisms in fostering trust, community buy-in in green projects so as to avoid future scenarios such as that experienced in the Kinangop Wind Power Project and long-term sustainability of carbon offset projects.

Through the above case studies from Norway, Brazil and Costa Rica this research illustrates that successful VCMs depend on transparency, inclusivity and robust regulatory frameworks. Norway's integration of indigenous rights and biodiversity safeguards ensures that carbon trading initiatives align with traditional knowledge and community priorities. Similarly, Brazil's Amazon Fund demonstrates the great potential of participatory decision-making and equitable resource allocation, while Costa Rica's Payment for Environmental Services program underscores the value of linking conservation efforts to tangible financial incentives for local communities.

The absence of clear regulatory measures and benefit-sharing guidelines in Kenya's carbon markets risks perpetuating inequalities, marginalising local indigenous communities and undermining the effectiveness of environmental initiatives. Without urgent legislative reforms, such as refining the proposed Carbon Credits Trading and Benefit Sharing Bill, these markets may fail to meet their goal of advancing environmental sustainability and social equity. The next chapter of this research will explore lessons from Norway, Brazil and Costa Rica, with a special focus on how these countries make use of legislative and institutional frameworks to align carbon market mechanisms with social justice principles. The chapter will also assess the

---

<sup>123</sup> Article 42, Constitution of Kenya, (2010)

<sup>124</sup> *Amina Said Abdalla & 2 others v County Government of Kilifi & 2 others* [2017] eKLR.

shortcomings of Kenya's proposed Carbon Credits Trading and Benefit Sharing Bill and its implications for marginalised groups, including indigenous communities such as the Ogiek and the Maasai. The chapter will also offer recommendations for enhancing transparency, ensuring community participation and promoting equity into the framework of Kenya's carbon trading policies.

## **Chapter 4: Adapting Global Best Practices: Enhancing Equity and Social Justice in Kenya's Carbon Market Policies.**

As Kenya's carbon market framework is in the pipeline, it is critical to draw lessons from global leaders in carbon trading who have successfully incorporated equity and social justice into their policies. This chapter explores the approaches taken by Norway, Brazil and Costa Rica, each of which demonstrates unique strategies for aligning carbon markets with environmental and social sustainability. Norway's emphasis on indigenous rights, Brazil's transparent governance of the Amazon Fund and Costa Rica's community-focused PES program provide invaluable insights for addressing the gaps in Kenya's current and proposed carbon trading framework. From the examination of these case studies in the previous chapter of this research, this chapter aims to highlight opportunities for Kenya to legislate and institutionalise equitable benefit-sharing mechanisms, enhance community participation and promote sustainable development for marginalised groups in alignment with Article 42 of the Constitution.

From the analysis in Chapter three of this research, it is evident that Norway stands out as a global leader in integrating indigenous rights into its environmental and carbon trading policies, ensuring that indigenous communities, particularly the Sami people, benefit equitably from these initiatives. The Sami, who inhabit Sapmi in northern Norway, play a critical role in preserving the country's natural resources, including forests that contribute to carbon sequestration. Norway has through the years recognised this and has adopted several mechanisms to align carbon trading projects with the rights and interests of the Sami. During the pilot phases of implementation of the Voluntary Carbon Markets in Norway, there was legislation of the Finnmark Act of 2005, which is a pivotal legislative framework that transferred ownership of ninety five percent of Finnmark County's land to the Finnmark Estate, a co-management entity representing both the Sami Parliament and the Finnmark County Council.<sup>125</sup> This structure ensures that decisions regarding land use, including carbon offset projects, are made with significant Sami involvement.

---

<sup>125</sup> Spitzer AJ and Selle P, *A Sami Land-Claims Settlement? Assessing Norway's Finnmark Act in a Comparative Perspective*, *Scandinavian Political Studies*, 2023, 46(4):288-308

Norway employs specific strategies to ensure that benefits from carbon trading projects flow equitably to the Sami communities. Compensation mechanisms for projects impacting Sami lands often include financial support and investments in community development.<sup>126</sup> Reforestation projects, for example, incorporate direct payments to Sami landowners, and this recognises their roles as environmental stewards while strengthening their economic resilience. The principle of free, prior and informed consent (FPIC) is rigorously applied, ensuring that no projects are implemented without the approval of the affected communities

Norway's experience offers critical lessons for Kenya, particularly in the development of its Carbon Credits Trading and Benefit Sharing Bill, 2023. While the Bill attempts to establish frameworks for benefit-sharing, it does not provide robust mechanisms for enforcing these agreements or ensuring transparency in benefit distribution. This leaves the Bill vulnerable to perpetuating the marginalisation of indigenous communities and failing to deliver equitable benefits. Unlike Norway's Finnmark Act, Kenya's Bill does not mandate co-management systems that ensure direct participation of indigenous communities in governance decisions. Sections 4 and 5 of the Bill, which establish and define the functions of the Carbon Credit Trading and Benefit Sharing Authority, fail to include indigenous representation in the Authority's structure.<sup>127</sup><sup>128</sup> To address these shortcomings, Kenya can draw insights from its own Climate Change (Carbon Markets) Regulations, 2024, which require that forty percent of earnings from land-based and twenty five percent of earnings from non-land based carbon projects be allocated to benefit local communities.<sup>129</sup> This provision could be adapted into the Bill as a binding requirement, ensuring that indigenous and marginalised groups receive a fair share of the revenues. By embedding a clear, enforceable allocation framework within the Bill, Kenya would establish a stronger mechanism for equitable benefit-sharing, reduce the risk of negative exploitation and build trust with affected communities. The Carbon Credit Trading and Benefit Sharing Bill (2023) also falls short in its weak provisions on community participation.

---

<sup>126</sup> Pellennec L, '*Indigenous Climate Justice – Insights from Sápmi*', Unpublished Master's Thesis, UiT The Arctic University of Norway, Tromsø, 2023, 25.

<sup>127</sup> Section 4, *Carbon Credits Trading and Benefit Sharing Bill*, 2023

<sup>128</sup> Section 5, *Carbon Credits Trading and Benefit Sharing Bill*, 2023

<sup>129</sup> Climate Change (Carbon Markets) Regulations, 2024, Regulation 29(1)-(2), available at <chrome-extension://efaidnbnmnncipcajpcglclefindmkaj/https://ke.chm-cbd.net/sites/ke/files/2024-05/LN%2084-CLIMATE%20CHANGE%20%28CARBON%20MARKETS%29%20REGULATIONS%2C%202024%20formatted.pdf> [Accessed 27th January 2025].

Although the Bill requires community development and benefit-sharing agreements,<sup>130</sup> it does not provide robust mechanisms for enforcing these agreements or ensuring transparency in benefit distribution. Therefore, the Kenyan Bill, in its current form, risks replicating the failures of carbon trading projects that have marginalised indigenous communities and failed to deliver equitable benefits.

The previous chapter highlighted the successes of the Amazon Fund in Brazil in promoting equity in the benefit sharing in Voluntary Carbon Markets. The Amazon Fund is successful because of its clear rules and openness. The program is known for its transparent systems, which include regular checks, public reports and accountability to donors like Norway and Germany.<sup>131</sup> These measures ensure that money is used wisely and for projects that make a real difference to the local communities. Another reason for the Fund's success is its participatory decision-making process. The Guidance Committee (COFA), which decides on project approvals, includes representatives from the government, civil society and indigenous communities.<sup>132</sup> This inclusive structure ensures that local people have a voice in how resources are used. Many projects supported by the Fund focus on providing sustainable incomes for small farmers and indigenous groups, linking conservation with economic benefit.

Brazil's successful approach to managing the Amazon Fund highlights gaps in Kenya's Carbon Credits Trading and Benefit Sharing Bill, 2023. While the Kenyan Bill aims to create rules for carbon trading and benefit sharing, it falls short in a number of key areas compared to Brazil. The Amazon Fund prioritises indigenous communities and small farmers over large competitors and investors, making sure they benefit directly from conservation projects. In Kenya, Section 32 of the proposed Bill talks about creating community agreements to share benefits, but fails to explain how the money will be divided fairly.<sup>133</sup> Without a clear formula, groups like the Ogiek, who rely on forests for their livelihoods, could be left out. In Brazil, the COFA committee includes indigenous and civil society representatives, ensuring that decisions are made with input from those most affected.

---

<sup>130</sup> Section 32, *Carbon Credits Trading and Benefit Sharing Bill, 2023*

<sup>131</sup> Horn C, *The Amazon Fund: Pathways to Social Inclusion*, Friedrich-Ebert-Stiftung, 2023, 20

<sup>132</sup> Wunder S, *Can payments for environmental services reduce deforestation and forest degradation?*, European Forest Institute, 2009, 213.

<sup>133</sup> Section 32, *Carbon Credits Trading and Benefit Sharing Bill, 2023*

Further, Section 33 of the Carbon Credits Trading and Benefit Sharing Bill mentions public participation but does not provide clear ways for communities to have real influence over decisions.<sup>134</sup> This could lead to communities feeling excluded from important discussions. This exclusionary approach directly contradicts Article 118 of the Kenyan Constitution, which mandates public access and participation in government affairs.<sup>135</sup> Consequently, the Bill, in its current form, may lay the groundwork for a future constitutional violation by failing to adequately ensure the meaningful participation of the very communities that will be most impacted by carbon trading activities. Section 33 ought to be amended to include formal committees with representatives from indigenous and local communities who can influence decisions on carbon projects. The Bill also ought to incorporate mechanisms for capacity building. There ought to be allocation of resources to train communities so they can fully participate in carbon trading and understand its benefits.

While Brazil's Amazon Fund demonstrates the power of transparent governance and participatory decision-making in reducing deforestation and promoting sustainable development, Costa Rica's Payment for Environmental Services (PES) program offers a complementary perspective by showcasing how carbon markets can be integrated with community-based conservation incentives. Through its program, Costa Rica pays landowners to maintain forest cover and ecological services like water control, biodiversity conservation, and carbon sequestration.<sup>136</sup> It has been highly effective in integrating carbon markets into local conservation efforts, positioning Costa Rica as a leader in environmental sustainability. By monetising the carbon sequestration benefits of forests, Costa Rica's system creates a steady flow of funding from international donors, national revenues and voluntary carbon market contributions. This integration enables Costa Rica to link its climate goals with economic incentives for local landowners and indigenous communities.<sup>137</sup>

---

<sup>134</sup> Section 33, *Carbon Credits Trading and Benefit Sharing Bill*, 2023

<sup>135</sup> Article 118, *Constitution of Kenya*, 2010

<sup>136</sup> Wunder S, *Can payments for environmental services reduce deforestation and forest degradation?*, European Forest Institute, 2009, 213.

<sup>137</sup> Daniels AE, *Understanding the Role of the National PES Program in Costa Rica*, Environmental Management, 2010,1,69-78.

A defining feature of Costa Rica's PES program is its emphasis on community participation and equity. The program ensures that small-scale farmers and marginalised groups, including indigenous communities, receive payments for their contributions to environmental conservation.<sup>138</sup> Additionally, the PES scheme provides technical support, capacity-building programs, and fair access to the benefits of conservation efforts. This approach has contributed to significant increases in forest cover, which grew from approximately twenty one percent in the 1980s to over fifty percent today.<sup>139</sup>

Kenya's Section 32 of the Bill mentions community benefit-sharing agreements but does not specify a clear framework or formula for ensuring equitable distribution among stakeholders.<sup>140</sup> Marginalised groups risk being sidelined due to the lack of explicit protections. Further, while the Bill establishes the Carbon Credits and Benefit Sharing Authority in Section 4,<sup>141</sup> it lacks provisions for regular audits, public reporting or a clear mechanism to track the use of carbon revenue. This absence could undermine trust and accountability. The Section 4 provision ought to be strengthened by mandating regular audits, detailed public reporting and independent reviews of the Carbon Credits and Benefit Sharing Authority's operations. These measures would enhance accountability and all involved parties would equitably benefit from the projects.

In conclusion, Kenya is at a pivotal moment in crafting its carbon market framework, with valuable lessons to learn from global leaders like Norway, Brazil and Costa Rica. Norway's recognition of indigenous rights through the Finnmark Act, Brazil's success with the Amazon Fund in promoting equity and transparency and Costa Rica's community-driven Payment for Environmental Services (PES) program all highlight the importance of prioritising marginalised groups, fostering accountability and encouraging public participation. However, Kenya's Carbon Credits Trading and Benefit Sharing Bill still contains gaps such as the lack of clear benefit-sharing formulas, weak community engagement mechanisms and limited transparency provisions. Kenya can align its policies with Article 42 of its Constitution, which states that

---

<sup>138</sup> Daniels AE, *Understanding the Role of the National PES Program in Costa Rica*, Environmental Management, 2010,1,69-78.

<sup>139</sup> Daniels AE, *Understanding the Role of the National PES Program in Costa Rica*, Environmental Management, 2010,1,69-78.

<sup>140</sup> Section 32, *Carbon Credits Trading and Benefit Sharing Bill*, 2023

<sup>141</sup> Section 4, *Carbon Credits Trading and Benefit Sharing Bill*, 2023

everyone has the right to a clean and healthy environment, including the right to have the environment protected for the benefit of current and future generations through legislative and other measures, by addressing these shortcomings and implementing best practices from these nations ,<sup>142</sup> ensuring that its carbon market system fosters sustainable development and equitable resource distribution for all stakeholders.

---

<sup>142</sup> Article 42, *Constitution of Kenya*, 2010

## **CHAPTER5: TOWARDS AN EQUITABLE CARBON MARKET IN KENYA**

This research set out to explore how Kenya can develop a fair and equitable carbon market system by learning from global best practices and addressing gaps in its current legal and institutional frameworks. From the hypothesis, the study focused on three main objectives: understanding global, regional and local policies on carbon markets; examining how carbon offset projects impact local communities in Kenya; and identifying lessons from countries like Norway, Brazil and Costa Rica to create an equitable system that upholds the environmental rights guaranteed by Article 42 of Kenya's Constitution.

The findings show that the hypothesis was correct because global frameworks like the Kyoto Protocol and the Paris Agreement set essential rules for carbon markets but often fail to address local needs such as ensuring that communities benefit from these markets. At the regional level, initiatives like the African Carbon Markets Initiative (ACMI) aim to promote inclusivity but they are still in their early stages and not yet fully effective in Kenya.

Case studies from Norway, Brazil, and Costa Rica provided useful lessons. Norway's Finnmark Act ensures that indigenous Sami communities are included in decisions about their land and benefit from carbon projects. Brazil's Amazon Fund shows the importance of transparency and including local communities in decision-making. Costa Rica's Payment for Environmental Services (PES) program integrates environmental conservation with financial incentives for communities, proving that economic benefits can go hand in hand with environmental protection.

The publication of the Climate Change (Carbon Markets) Regulations, 2024, marks a significant milestone in Kenya's journey toward operationalising carbon markets. These regulations provide a robust framework for managing carbon projects, ensuring compliance with global standards and creating tangible benefits for local communities. Key provisions, such as the allocation of forty percent of earnings from land-based projects and twenty five percent from non-land-based projects to local communities, offer an innovative approach to benefit-sharing. With other complementary legislation on the subject matter, however, Kenya has a long way to go.

Kenya's Carbon Credits Trading and Benefit Sharing Bill, 2023 has good intentions but needs improvement. It does not clearly state how benefits will be shared fairly, especially with

indigenous communities like the Ogiek and Maasai. It also lacks strong rules to ensure transparency and meaningful community participation. The people who are most impacted by climate change and who are essential to conservation efforts may be left out as a result of these disparities.

In conclusion, this research achieved its objectives by identifying legal gaps and providing practical solutions for Kenya's carbon market system. By learning from global best practices and strengthening its laws, Kenya can create a system that supports environmental sustainability and promotes fairness for all its people. Future research should focus on how these policies are implemented and their real impact on communities.

## Bibliography

1. African Carbon Markets Initiative, *Africa Carbon Markets Initiative: Roadmap Report 2022*, ACMI, 2022, 18--available at <https://www.africacarbonmarkets.org>
2. Alden L, Wily, The Community Land Act in Kenya. Opportunities and challenges for communities, 7(1) 1-25 (2018)
3. Amina Said Abdalla & 2 others v County Government of Kilifi & 2 others [2017] eKLR.
4. Arko. T, *Carbon Markets and the New Scramble for African Land*, The Elephant, 2024.
5. Article 12, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 11 December 1997, UN Doc. FCCC/CP/1997/L.71Add.1.
6. Article 12, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 11 December 1997, UN Doc. FCCC/CP/1997/L.71Add.1.
7. Article 17, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 11 December 1997, UN Doc. FCCC/CP/1997/L.71Add.1.
8. Article 2, Paris Climate Agreement, (2015), 54113 UNFCCC.
9. Article 4, Paris Climate Agreement(2015), 54113 UNFCCC.
10. Article 42 Constitution of Kenya (2010)
11. Article 42, Constitution of Kenya (2010)
12. Article 6, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 11 December 1997, UN Doc. FCCC/CP/1997/L.71Add.1.
13. Article 6, Paris Agreement under the United Nations Framework Convention on Climate Change, 12 December 2015, UN Doc. FCCC/CP/2015/L.9/Rev.1.
14. Article 6(4), Paris Agreement under the United Nations Framework Convention on Climate Change, 12 December 2015, UN Doc. FCCC/CP/2015/L.9/Rev.1.
15. Bowmans, *Kenya: Insights on the Climate Change (Carbon Markets) Regulations*, 2024, Bowmans, 2024, available at <https://bowmanslaw.com>
16. Bulkeley H, Carmin J, Castan Broto V, Edwards G, and Fuller S, *Climate Justice and Community Participation in Carbon Projects*, Global Environmental Change, 2013.
17. Bumpus A and Liverman D, *Accumulation by Decarbonisation and the Governance of Carbon Offsets*, Economic Geography, 2008.

18. Business & Human Rights Resource Centre, Report Claims Titanium Mining Host Community Has Not Benefited From Mining Operations, Business & Human Rights Resource Centre, 2023, available at <https://www.business-humanrights.org/en/latest-news/report-claims-titanium-mining-host-community-has-not-benefited-from-mining-operations>.
19. Climate Change (Amendment) Act, No.9, 2023.
20. Climate Change (Carbon Markets) Regulations, 2024, Regulation 29(1)-(2), available at <chrome-extension://efaiduhmmnnippcajpcglclefindmkaj/https://ke.chm-cbd.net/sites/ke/files/2024-05/LN%2084-CLIMATE%20CHANGE%20%28CARBON%20MARKETS%209%20REGULATIONS%2C%202024%20formatted.pdf>.
21. Cowen, T, Public goods definitions and their institutional context: A critique of public goods theory, vol 63, Review of social economy, No.1, 1985.
22. Daniels AE, Understanding the Role of the National PES Program in Costa Rica, Environmental Management, 2010,1.
23. Ellerman A, Convery F and de Perthuis C, *Pricing Carbon: The European Union Emissions Trading Scheme*, Cambridge University Press, Cambridge, 2010.
24. Ellerman A, Convery F and de Perthuis C, *Pricing Carbon: The European Union Emissions Trading Scheme*, Cambridge University Press, Cambridge, 2010.
25. Environmental Impact Assessment Review, Barriers and Opportunities to incorporating Environmental Policy Act,2022.
26. Gatekeeper series, The market for voluntary carbon offsets: A new tool for sustainable development?, 2005.
27. Government of Kenya, *National Climate Change Action Plan (NCCAP) 2018–2022*, Ministry of Environment and Forestry, 2018.
28. Horn C, The Amazon Fund: Pathways to Social Inclusion, Friedrich-Ebert-Stiftung, 2023
29. International Emissions Trading Association (IETA), *The Role of Carbon Pricing in Emissions Trading Systems: 2020 Status Report*, IETA, Geneva, 2020.
30. Jaffe J, Stavins R and Schmalensee R, *Linking Tradable Permit Systems: A Key Element of Emerging International Climate Policy Architecture*, 36 Ecology Law Quarterly 4, 2010.

31. Kamau. J, *Why Sh15 Billion Kinangop Power Mill Burnt Out Like A Candle in the Wind*, Nation Media Group, 7 Jul 2018, <https://nation.africa/kenya/news/why-sh15-billion-kinangop-power-mill-burned-out-like-a-candle-in-the-wind-64286>
32. Kameri-Mbote P and Cullet P, Kenya and Climate Change: The Clean Development Mechanism in Perspective, IELRC Working Paper 2007-03, International Environmental Law Research Centre, Geneva, 2007.
33. Lennon. B, Dunphy. N, *Community Acceptability and the Energy Transition: A Citizen's Perspective*, Energy, Sustainability and Society, 2019, 8 -- Available at <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-019-0218-z#Sec14>
34. Marcovitch J and Pinsky V, Policy Innovation for Sustainable Development: The Case of the Amazon Fund, Sustainability, 2024.
35. Marshall Claire, Kenya's Ogiek people being evicted for carbon credits - lawyers, BBC, 9th Nov 2023, <https://www.bbc.com/news/world-africa-67352067>.
36. Martin R, de Preux L and Wagner U, *The Impact of the EU ETS on Regulated Firms: What Is the Evidence after Ten Years?*, 9 Review of Environmental Economics and Policy 1, 2015.
37. Ministry of Environment and Forestry, Updated Nationally Determined Contribution 2020, 24th Dec 2020.
38. Moffat Kamau & 9 others V Aeolus Kenya Ltd & 9 others, Constitutional Petition 13 of 2015 (Environment and Land Court at Nakuru), [2016] eKLR
39. Nicholas Stern, *The Economics of Climate Change: The Stern Review*, Cambridge University Press, Cambridge, 2007.
40. Ngoti I, *The role of sense of ownership in rural community mini-grid management: Qualitative case study from Tanzania*, Energy, Sustainability and Society, 2024, 14-- Available at <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-024-00496-7>.
41. Nkatha Muriungi, Kenya's carbon markets: The goose that lays the golden egg?, Jan 2024.

42. Nyaboke J, The Clean Development Mechanism in Kenya: A Case Study of the Olkaria Geothermal Project, Unpublished LLM Dissertation, University of Nairobi, Nairobi, 2014.
43. OECD, *Competition Law and Policy in Costa Rica: A Peer Review 2014*, Organisation for Economic Co-operation and Development, 2014, available at [https://www.oecd-ilibrary.org/competition-law-and-policy-in-costa-rica-a-peer-review-2014\\_7289d80a-en.pdf](https://www.oecd-ilibrary.org/competition-law-and-policy-in-costa-rica-a-peer-review-2014_7289d80a-en.pdf).
44. Okoth Ogendo, *Constitutions without Constitutionalism: Reflections of an African Paradox*, in Douglas Greenberg(eds) in *Constitutionalism and Democracy: Transitions in the Contemporary World*, 2nd ed, Oxford Academic, New York, 1993.
45. Pagiola S, Payments for Environmental Services in Costa Rica, *Ecological Economics*, 2008, 65(4).
46. Pellemecc L, ‘Indigenous Climate Justice – Insights from Sápmi’, Unpublished Master’s Thesis, UIT The Arctic University of Norway, Tromsø, 2023.
47. Pereira L, Towards a Transformative Governance of the Amazon, *Global Policy*, 2022, 13
48. Perlingeiro R, *Brazil's Administrative Justice System in a Comparative Context*, *Revista de Direito Internacional*, 2015, 12(2), 65-79, available at <https://www.scielo.br/jrinc/a/7Zz5BNHBBX6XRq67VB4hjHF/?lang=en>.
49. Peterdy Kyle, *Carbon Credits*, Corporate Finance Institute, 2015
50. Richard G Newell, Carbon markets 15 years after Kyoto: Lessons learned, new challenges, 27(1), *The Journal of Economic Perspectives*, 2013
51. Sanchez G, Costa Rica’s Payment for Environmental Services Program: Intention, Implementation and Impact, 2007, 21(5)
52. Samuel Fankhauser, *Designing Carbon Markets. Part 1: Carbon Markets in Time*, (38) *Energy Policy*, 2010
53. Schroeder. D, *Benefit Sharing: It’s Time for a Definition*, Vol 33, *Journal of Medical Ethics*, No.4, 2007.
54. Section 13, *Climate Change (amendment) Act*, 2023
55. Section 23, *Climate Change (amendment) Act*, 2023
56. Section 3, *Judicature Act*, 1967.
57. Section 3, *Natural Resources (Benefit Sharing Bill)*, 2018

58. Section 4, Carbon Credits Trading and Benefit Sharing Bill, 2023
59. Section 5, Carbon Credits Trading and Benefit Sharing Bill, 2023
60. Section 69, Carbon Credit Trading and Benefit Sharing Bill (2023)
61. Section 9(8) Climate Change (amendment) Act, 2023.
62. Spitzer AJ and Seile P, A Sami Land-Claims Settlement? Assessing Norway's Finnmark Act in a Comparative Perspective, *Scandinavian Political Studies*, 2023, 46(4)
63. UNDP blog post, What are carbon markets and why are they important?, May 18 2022.
64. United Nations Framework Convention on Climate Change, 'Clean Development Mechanism (CDM)' <https://cdm.unfccc.int/> on 7 October 2024.
65. Walker G et al., *Community Acceptability and Social Inclusion in Renewable Energy Projects*, *Energy, Sustainability and Society*, 2021, 19--available at <https://energysustainsoc.biomedcentral.com>.
66. World Bank, Carbon Pricing Leadership Coalition: Leadership Report 2021, World Bank Group, Washington DC, 2021.
67. Wunder S, Can payments for environmental services reduce deforestation and forest degradation?, *European Forest Institute*, 2009.
68. <https://leap.unep.org/en/countries/ke/national-legislation/kenyas-updated-nationally-determined-contribution-ndc-2020-2030>
69. <https://www.refworld.org/reference/countryrep/mrgi/2018/en/120315>.
70. Article 118, Constitution of Kenya, 2010
71. Vivid Economics, *Carbon Leakage Prospects under Phase III of the EU ETS and Beyond*, Report for the UK Government, London, 2013.
72. Article 6, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 11 December 1997, UN Doc. FCCC/CP/1997/L.71Add.1.

