

**LAWFOYER INTERNATIONAL**  
**JOURNAL OF DOCTRINAL LEGAL**  
**RESEARCH**

**(ISSN: 2583-7753)**

---

---

**Volume 2 | Issue 2**

---

---

**2024**

© 2024 *LawFoyer International Journal of Doctrinal Legal Research*

Follow this and additional research works at: [www.lijdlr.com](http://www.lijdlr.com)  
Under the Platform of LawFoyer – [www.lawfoyer.in](http://www.lawfoyer.in)

---

---

After careful consideration, the editorial board of LawFoyer International Journal of Doctrinal Legal Research has decided to publish this submission as part of the publication.

In case of **any suggestions or complaints**, kindly contact [info.lijdlr@gmail.com](mailto:info.lijdlr@gmail.com)

---

**To submit your Manuscript** for Publication in the **LawFoyer International Journal of Doctrinal Legal Research**, To submit your Manuscript [Click here](#)

---

# THE EFFICACY OF CARBON TRADING VIS A VIS ENVIRONMENTAL JUSTICE IN KENYA AND OTHER DEVELOPING COUNTRIES

---

Shadrack Chai Chivatsi<sup>1</sup>

## I. ABSTRACT

This article critically analyses the prolonged environmental injustices that have been occurring in the global south. Carbon trading being used as a mitigation measure and existing in two forms voluntary and regulatory compliance markets. This study aims to evaluate the efficacy of carbon trading schemes in Kenya and comparable developing countries in delivering environmental justice and community-level benefits besides emissions reductions.

A mixed-methods impact assessment of operational REDD+ and Clean Development Mechanism projects showing effectiveness in the process of trading. Analysed data, community consultation practices, governance frameworks and allocation of livelihood co-benefits. Quantitative data is statistically tested for evidence of disparate intra-project impacts on different social groups. Qualitative insights and accessing the effectiveness of safeguards in empowering marginalized communities and addressing potential trade-offs.

Cross-country comparisons will identify best practices. Policy recommendations required for balancing mitigation rigour with principles of distributive, procedural and corrective justice in carbon market design for poverty-vulnerable contexts. As the international community scales up carbon pricing under the Paris Agreement, analytics from this research can help maximize developing countrys NDC ambitions through equitable, community-centric market-based climate actions aligned with the UNFCCC's environmental justice mandate.

---

<sup>1</sup> Student at the University of Nairobi, Kenya

## II. KEYWORDS

Western development; emissions; sustainable systems; knowledge systems; climate politics

## III. INTRODUCTION

In 1960, renowned environmental writer Ronald Coase proposed assigning property rights to pollution and further argued that arbitrage between actors in a market with low transaction costs could result in efficient environmental solutions.<sup>2</sup> The solution to this problem in governance was to create a tradable instrument.<sup>3</sup> Rather than have the government dictate each party's actions through direct (command-and-control) regulation, a market would be created wherein parties could bargain for the right to determine their actions.

For the case at hand, this would be a carbon emission permit, allowing the bearer the right to emit a certain tonnage of carbon each year that could be bought and sold between parties. So long as the costs of inter-party transactions are low and there are numerous sellers and buyers, then this arrangement should lead to negotiations between parties that results in a reduction in total carbon emissions in the most efficient manner possible. In 1988, Applied Energy Services different forms of pollution could be priced and how governments could construct a taxation systems and market instruments to fund the clean-up of environmental damage.

'Four decades ago, the concept of environmental justice was a mere footnote. Today, environmental justice is a headline-registering on the radar of the media; green groups; civil rights, human rights, and racial justice organizations; social media networks; academic consortia; educational institutions; and at least one of the major political parties."<sup>4</sup> Arguably, in the Global South, environmental justice is now longer

---

<sup>2</sup> Ronald H Coase, "The Problem of Social Cost" (1960) Vol III LE 23,

<sup>3</sup> Chai Shadrack, 'The Inception of Carbon Credits and Offsets in the Climate Action Agenda of the United Nation' <[https://www.academia.edu/116377252/The\\_inception\\_of\\_carbon\\_credits\\_and\\_offsets\\_in\\_the\\_Climate\\_Action\\_agenda\\_of\\_the\\_United\\_Nation](https://www.academia.edu/116377252/The_inception_of_carbon_credits_and_offsets_in_the_Climate_Action_agenda_of_the_United_Nation)> accessed 26 June 2024.

<sup>4</sup> (Bullard 2021: 243-244)

relegated to the academic and legal backwaters, but it has gone mainstream and its Sensitivity is Internal.<sup>5</sup>

Also, I am not suggesting that conceptualisation of environmental justice should be discarded in the Global South but that scholars should be more nuanced and aware of 'home-grown' perspectives on environmental justice.<sup>6</sup> This is against the background provided by the Environmental Justice Atlas which shows that the majority of the environmental injustices in the world takes place in the Global South.<sup>7</sup>

#### **IV. RESEARCH OBJECTIVES**

- To understand the fundamentals of carbon trading laws and regulations on climate change mitigation and how they have impacted on climate change.
- To exhaustively evaluate how community involvement, participation, and empowerment impact the results of carbon trading initiatives in advancing environmental justice and sustainable development in Kenya and similar developing nations.
- To examine how governance structures and regulatory mechanisms impact transparency, accountability, and inclusivity in carbon trading schemes for environmental justice in the global south.

#### **V. RESEARCH QUESTIONS**

- What specific legal and regulatory safeguards have been established in the participating countries to ensure carbon market programs do not disproportionately burden or marginalize vulnerable communities? Are these sufficient?

---

<sup>5</sup> Ako, R. (2013). *Environmental justice in developing countries: perspectives from Africa and Asia-Pacific*. Routledge

<sup>6</sup> Dove, Michael (1983) 'Theories of Swidden Agriculture and the Political Economy of Ignorance', *Agroforestry Systems* 1: 95-103.

<sup>7</sup> Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: climate change and the discourse of environmental justice. *Wiley Interdisciplinary Reviews: Climate Change*, 5(3), 359-374.

- Do carbon credit allocation methodologies and benefit-sharing arrangements under REDD+ and CDM projects align with the right to development and equitable resource distribution provisions in domestic legislation?

## **VI. RESEARCH HYPOTHESIS**

This study aims to empirically evaluate the hypothesis that while emissions trading schemes have the technical capability to help mitigate climate change impacts and lower carbon output in developing nations such as Kenya, their implementation may raise issues pertaining to environmental equity and justice.

Specifically, this research project will examine whether carbon markets allocate the benefits and costs of such initiatives in a disproportionately uneven manner that adversely impacts marginalized communities. If such inequitable distribution does occur, it can contribute to environmental injustices in these regions.

A mixed-methods approach will be adopted involving both qualitative and quantitative assessment tools. On the qualitative front, governance structures and regulatory frameworks underlying emissions trading programs in Kenya and comparable developing countries will be analyzed through document review and interviews with key stakeholders. Special focus will be on evaluating the extent and effectiveness of community consultation practices adopted during scheme design and rollout.

On the quantitative side, socio-economic impact assessments will be conducted to gauge how such carbon markets have influenced issues like resource access, livelihood opportunities, energy costs and development outcomes across different socio-economic strata over time. Statistical analyses will help identify any significant disparate impacts on vulnerable groups.

Overall, this research aims to provide a holistic examination of whether emissions trading as a policy instrument has truly been effective in promoting the twin objectives of environmental justice as well as sustainable development for all sections of society in the specified developing country contexts, after considering both structural and distributed effects.

Findings from the study are expected to offer valuable policy insights into strengthening the governance and operational mechanisms of existing and future carbon pricing initiatives to minimize inequitable outcomes, thereby maximizing their mitigation potential while also upholding principles of equity.

## **VII. RESEARCH METHODOLOGY**

Both empirical and doctrinal research have been used in this research paper. Empirical through analysing and comparing substantive data used in carbon trading (CMDs) while also doctrinal through conducting legal research that involves the study and analysis of existing legal provisions, international laws and regulations, policies and scholarly works. This methodology is well-suited for examining the theoretical and conceptual aspects of law and for providing a systematic exposition of legal doctrines and principles

The primary sources relied upon in doctrinal research include statutory materials, international laws, and authoritative texts, while secondary sources such as commentaries, articles and legal digests are also consulted. The research process involves the identification, collection, and critical analysis of these sources to draw logical conclusions and offer insights into the legal issues under investigation. Through doctrinal research and a bit of empirical data, this paper seeks to provide a comprehensive and coherent understanding of the legal framework governing the subject matter at hand.

## **VIII. LITERATURE REVIEW**

This research paper centralises on the key provisions under the Kenyan jurisdiction in section 8 to 14 and also section 44 (q) of Energy Act, 2019. Section 125 of the Environmental Management and Coordination Act, 1999 along with section 2 to 5 of Climate Change Act, 2016. On the rules and regulations of International law the Montreal protocol, Kyoto protocol and finally the Paris Agreement of 2015.

The literature reviewed in the research paper renders a patulous analysis upon the outgrowth of carbon trading as a paradigm for environmental justice in the global south. Inclusive also of its effectiveness. This research paper scrutinizes regarding the

excrescence of climate change navigation measures, along with certain recommendations upon this theme.

## **IX. HOW CARBON TRADING CREATES IGNORANCE**

First, carbon markets are designed to make government regulation of emissions cheaper by abstracting from how the cuts are made.<sup>8</sup> Corporations that find it too expensive to meet their emissions targets through their own efforts can buy the further emissions cuts they need from firms that are able to overshoot their targets cheaply and thus have a surplus of pollution credits to sell.<sup>9</sup>

Carbon markets thus automatically gloss over what kind of technology is used to make the cuts, what kind of industry is using it, and whether the cut made in the place where it is cheapest today will lead in fact to a historical trajectory of the least emissions in the future.<sup>10</sup> Yet these are areas requiring the most serious research and policy attention.<sup>11</sup> How cuts are made now, and who makes them, will have an influence on how much can be cut in the future; the cut made by a factory in Tomsk may be the result of an energy technology or way of organizing social life that will stimulate vastly multiplied future cuts, whereas a quantitatively equal cut made by a firm in Toledo may be a routine efficiency improvement that should have been made long ago and leads to little else.<sup>12</sup>

Drawing attention away from the type of innovation, long-term investments and broad restructuring that are crucial to speeding the transition away from fossil fuels, carbon trading tends to prioritize scattered stopgap measures that are merely likely to delay the structural change required.<sup>13</sup> While emissions trading provides financial incentives for one class of polluters to innovate, it simultaneously provides financial incentives for the industries at the very centre of the global warming problem,

---

<sup>8</sup> Temitope, R. (2010). The judicial recognition and enforcement of the right to environment: differing perspectives from Nigeria and India. *NUJS L. Rev.*, 3, 423.

<sup>9</sup> *Ibid*

<sup>10</sup> Ferguson, James (1990) *The Anti-Politics Machine: 'Development', DE politicization, and Bureaucratic Power in Lesotho*, Cambridge: Cambridge University Press.

<sup>11</sup> Redman, Janet (2008) *World Bank: Climate profiteer*, Washington, DC: Institute for Policy Studies

<sup>12</sup> Anaebo, O. K., & Ekhatator, E. O. (2015). Realising substantive rights to healthy environment in Nigeria: A case for constitutionalisation. *Environmental Law Review*, 17(2), 82-99.

<sup>13</sup> World Bank (2007) *State and Trends of the Carbon Market 2007*, Washington, DC: World Bank.

including electricity generators, chemicals, iron and steel, cement, oil and gas, aviation and so on, to delay the sweeping changes they will have to undertake.

Because it is based on the false assumption that all numerically identical emissions cuts are the same in terms of climate history, carbon trading is ill-designed to stimulate sociological, political and historical inquiry into how societies achieve radical change of the kind required to handle the climate crisis.<sup>14</sup> Instead it reinforces the current overemphasis among policymakers on finding clever means of making a fossil fuel-dependent system slightly more efficient and of calculating timelines for achieving numerical atmospheric concentration targets that, without attention to social and political processes, are purely aspirational.<sup>15</sup>

Second, in de-emphasizing how emissions cuts are made, and in seeking new things that might be considered cuts, carbon trading has also encouraged intellectuals to posit equivalences that are scientifically dubious.<sup>16</sup> For example, in order to be able to trade cuts in carbon dioxide for cuts in other greenhouse gases, the climatic hazards associated with each gas must be commensurate with the others. Figures for 'CO2 equivalences' emanating from the Intergovernmental Panel on Climate Change, the UN's scientific climate advisory panel, however, are admitted to be gross oversimplifications: the effects and lifetimes of different greenhouse gases in different parts of the atmosphere are so complex and multiple that any straightforward equation is impossible.<sup>17</sup>

"The original carbon dioxide equivalence figure for HFC-23 of 11,700 originally put forward by the IPCC in 1995-1996 was revised in 2007 to 14,800, and the error band of this estimate is still an enormous plus or minus 5,000."<sup>18</sup> The practical effects of this oversimplification of reality are considerable: HFC-23 destruction is the largest single

---

<sup>14</sup> Ghosh, Soumitra and Jutta Kill (forthcoming) *The Carbon Market in India*, Kolkata: National Forum of Forest Peoples and Forest Workers.

<sup>15</sup> Hobart, Mark (ed.) (1993) *An Anthropological Critique of Development: The growth of ignorance*, London: Routledge

<sup>16</sup> *ibid*

<sup>17</sup> *ibid*

<sup>18</sup> (Mackenzie, forthcoming)



credit earner in the Kyoto Protocol's Clean Development Mechanism, accounting for 67 percent of the credits generated in 2005 and 34 percent of those generated in 2006.

Third, if carbon markets necessarily abstract from how emissions cuts are made, they also abstract from where they are made again in the cause of maximizing cost-effectiveness. But this abstraction systematically obscures the significance of place. This gap is likely to be damaging to social equality, since the industry's most firmly locked into fossil fuel exploitation or use, and most likely to be carbon pollution right buyers, tend to have a disproportionate adverse effect on poorer and disadvantaged communities. Carbon trading also requires downplaying the different ecological effects that pollution can have in different biomes.

Another way carbon trading encourages ignorance has to do with the way it discounts the enormous distances between, on the one hand, carbon-credit figures appearing on computer screens in the urban offices of carbon consultants, UN officials, bankers, hedge fund managers and ministries and, on the other, the complex politics, biology and physics of hydroelectric dam or wind farm sites in less industrialized countries, together with the social and technological arenas in which flows of carbon dioxide and other greenhouse molecules are imagined and negotiated by scientists and technicians.

British buyers of offsets from a company that has contracted with an elite conservationist organization in Rajasthan to provide biogas cooking stoves for rural villages near a remote tiger reserve 7,000 kilometres away are unlikely ever to have the chance to verify what effects the project is having on local wood-gathering practices or class relations, much less its climatic effects<sup>19</sup>. Yet they are encouraged to believe that they can understand all factors relevant to the transaction.

Fourth, in a classic instance of ignoring their own background assumptions, carbon trading proponents have overgeneralized the lessons of the sulphur dioxide trading system that has been in place in the US since the 1990s the only pollution market to

---

<sup>19</sup> (Ghosh and Kill, forthcoming)

date that has not been an unambiguous failure, and the main model for the carbon market set up by the Kyoto Protocol of 1997.

The US SO<sub>2</sub> market was made possible by the relative simplicity of the regulatory task (achieving modest numerical cuts in a single industrial pollutant emitted by a comparatively small group of sources), the possibility of establishing clear property rights in pollution dumps (which were handed over free to polluting corporations) and the recent invention of continuous emissions monitoring equipment capable to transmitting emissions data to Washington, DC in near real-time. Carbon traders are compelled to make the false assumption that similar property rights arrangements, measurement systems and enforcement will be available for global carbon trading. This assumption is demonstrably false on numerous grounds.

First, the sulphur dioxide trading system was not complicated by the presence of offsets, or special pollution-saving projects designed to inject additional pollution rights into the market; most carbon markets are. This is important since, second, measurement of offsets is impossible even in principle.<sup>20</sup> Third, even without taking offsets into consideration, the measurements necessary to support a credible carbon market are not being made, even in many technically advanced European countries.

Fourth, the highly centralized enforcement systems that carbon trading requires are absent in most countries of the world. Fifth, the question of who owns the world's carbon dumps, and how they gain that ownership, is becoming increasingly contested in a way that ownership of sulphur dioxide dumps in the US was not. For instance, European governments' free gift of carbon pollution rights to their biggest industrial polluters under the European Union Emissions Trading Scheme has become an international scandal in view of the windfall profits being made by fossil fuel-fired power generators under the system.

Fifth, most existing and contemplated carbon markets trade both in emissions allowances and in carbon credits produced by offset projects, which then are exchanged for each other. It is even written into the Kyoto Protocol that offsets are

---

<sup>20</sup> (Lohmann, 2001, 2005).

emissions reductions. However, this is false. Offset projects can involve planting trees, fertilizing oceans to stimulate carbon-gobbling algae, burning methane from landfills to generate electricity or setting up wind farms yet none of these things can be verified to be climatically equivalent to each other or to reducing one's fossil fuel consumption (Lohmann, 2006). The carbon markets' UN-approved mandate to 'make them the same'<sup>21</sup> has led to the creation of an enormous technocracy producing thousands of pages of forbiddingly technical documents every month dedicated to refining arcane metrics that hide this reality.<sup>22</sup>

Sixth, in a pattern reminiscent of much that goes under the name of development, carbon markets are actively undermining much of the knowledge base required for tackling global warming. One example is the local low-carbon irrigation system of Sarona village along the fast-flowing Bhilangana river in mountainous Uttaranchal, India. The system uses porous rock dams to divert water gently into small canals while letting silt through. The water then flows into still smaller channels feeding terraced rice and wheat fields that then discharge any remaining water back into the river.

This well-established, sustainable system, like many others in the region, is now under threat from a 22.5 megawatt run-of-the-river hydropower system being built by Swasti Power Engineering with prospective Kyoto Protocol carbon finance. Knock-on effects would include loss of livelihoods, migration and loss of a type of knowledge that, ironically, will be especially valuable in a greenhouse world. Sarona residents were never consulted and first learned about the project only in 2003 when construction machines arrived. Conflict, police brutality and arrests followed.

In the mountainous river valleys of Uttaranchal, some 146 similar dam projects are proposed or underway, with hundreds more hydroelectric schemes seeking carbon finance across the world<sup>23</sup> Nor is the threat only to long-established knowledge.<sup>24</sup> In February 2008, for instance, two dozen California environmental justice organizations

---

<sup>21</sup> (MacKenzie, forthcoming)

<sup>22</sup> (Lohmann, forthcoming)

<sup>23</sup> (Ghosh and Kill, forthcoming).

<sup>24</sup> Lohmann, Larry (1998b) *Missing the Point of Development Talk: Reflections for activists*, Sturminster Newton: The Corner House

released a strongly worded statement condemning carbon trading as a 'charade to continue business as usual' that would block investment in creating new renewable energy know-how needed to help stop the 21 new fossil fuel-fired power plants planned for the state under its carbon-trading advocate governor.<sup>25</sup>

Seventh, in a pattern that is not coincidental, one after another carbon trading institution can be heard naively repeating neo-colonialist and racist shibboleths of development discourse. In a recent *New Yorker* magazine, for example, Richard Sandor, Chicago commodities trader, inventor of interest rate derivatives and one of the principal architects of pollution markets, is approvingly quoted endorsing schemes to commodify native forests in the global South for use as sinks for industrial carbon dioxide: 'They are slashing and burning and cutting the forests of the world.

It may be a quarter of global warming and we can get the rate to two per cent simply by inventing a preservation credit and making that forest have value in other ways. Who loses when we do that?'<sup>26</sup> Ignorance of this stamp, which has long been publicly exposed by the patient research of networks such as the World Rainforest Movement, damages the struggle for a liveable climate not least because of the way it nourishes the general process of knowledge destruction exemplified in the Bhilangana river project mentioned above.<sup>27</sup>

Eighth, carbon offset companies offering the spurious commodity of 'carbon neutrality' to individual consumers necessarily design their market in a way that hides the roots of climate change that is, the historical overuse and skewed use of the earth's carbon cycling capacity by a global minority as well as other systemic social and technical processes. Offset advertising teaches that the climate change problem is due to, and can be addressed by, individual consumer choices.

It encourages northern consumers to consider part of their emissions to be simply 'unavoidable' rather than as part of a pattern of energy use that can only be tackled through political and social organizing. It conceptualizes global warming primarily

---

<sup>25</sup> (Los Angeles Times, 20 February 2008)

<sup>26</sup> (*New Yorker*, 25 February 2008, emphasis added.)

<sup>27</sup> *Ibid*

through complex calculations of guilt over individual 'carbon footprints' rather than, for example, the study of international oil politics or the history of social movements that have achieved structural change of the magnitude required to alleviate global warming.<sup>28</sup>

Ninth, the cloud of jargon that is inevitable with the highly centralized, quantification-heavy regulatory apparatus that constitutes carbon trading keeps even many journalists and environmentalists ignorant about how little governments and the UN system are actually doing about climate change. Few members of the general public have any inkling of how far the attempt to set up a giant global carbon market has gone, much less of the meaning of carbon market acronyms and technical terms such as additionality, model rules, meth panels, supplementarity, leakage, AAUs, CERs, ERUs, DNAs, DOEs, NAPs, PDDs, AIEs, SBIs, SBSTAs, COPs, MOPs, COP/MOPs and so on. This indirect but highly effective suppression of public discussion is precisely the opposite of the wide-ranging grassroots debate and political mobilization that the climate crisis calls for.<sup>29</sup>

Tenth, this same regulatory apparatus also functions to recast heavy fossil fuel polluters as protagonists of the climate battle while concealing the contributions of ordinary communities and progressive social movements.<sup>30</sup> Under the Kyoto Protocol and elsewhere, carbon credits necessarily go mainly to well-financed, high emitting operations with official and UN connections and the money to hire professional carbon consultants capable of documenting what pollution 'savings' are being made, but not to nonprofessional actors in already low-emitting contexts or social movements actively working to reduce use of fossil fuels.

---

<sup>28</sup> Lohmann, Larry (forthcoming) 'Toward a Different Debate in Environmental Accounting: The cases of carbon and cost-benefit', Accounting Mitchell, Timothy (2007) 'The Properties of Markets', in Donald MacKenzie (ed.) *Do Economists Make Markets? On the performativity of economics*, pp 244-275, Princeton: Princeton University Press, Organizations and Society doi:10.1016/j.aos.2008.03.002.

<sup>29</sup> Ekhaton, E.O. (2014). Improving access to environmental justice under the African Charter on human and peoples' rights: the roles of NGOs in Nigeria. *African Journal of International and Comparative Law*, 22(1), 63-79.

<sup>30</sup> Lohmann, Larry (2001) *Democracy or Carbocracy? Carbon trading and the future of the climate debate*, Sturminster Newton: The Corner House

As a result, heavy polluters and local corporate 'bad citizens', such as India's Tata Group, ITC, Birla, and Jindal, Korea's Hu-Chems Fine Chemical, Brazil's Votorantim and South Africa's Mondi and Sasol, become stars of heroic green narratives while the contributions of villagers in places like the Bhilangana river remain a static, unrecognized background.<sup>31</sup>

## **X. LEGAL PROVISIONS UNDER KENYAN JURISDICTION**

### **A. Energy Act 2019<sup>32</sup>**

Under sections 8-14, this Act provides that the Cabinet Secretary of Energy and petroleum be vested with powers to harness opportunities for the utilization of clean energy mechanisms and technologies. These provisions accord Kenya the opportunity to earn carbon credits and trade them. Section 44 (q) requires Rural Electrification and Renewable Energy Corporation to harness opportunities offered under clean development mechanisms and other mechanisms including, but not limited to, carbon credit trading to promote the development and exploitation of renewable energy sources. Renewable energy projects form part of the projects under carbon trading in the clean development mechanisms.<sup>33</sup>

### **B. The Environmental Management and Coordination Act 1999**

Section 125 of the Act also establishes the National Environmental Tribunal as a quasi-judicial body with jurisdiction to preside over disputes of environmental nature arising under the Act.<sup>34</sup> The Act does not mention carbon credits but the provisions of the Act are applicable in the process of carbon trading and the projects undertaking

---

<sup>31</sup> Pigg, Stacy Leigh (1992) 'Inventing Social Categories through Place: Social representations and development in Nepal', *Comparative Studies in Society and History* 34(3): 491-513.

<sup>32</sup> Act No. 1 of 2019

<sup>33</sup> Dove, Michael (1983) 'Theories of Swidden Agriculture and the Political Economy of Ignorance', *Agroforestry Systems* 1: 95-103.

<sup>34</sup> 'The Hitchhiker's Guide to the EU Taxonomy (& SFDR) - South Pole Blog' (*South Pole*) <<https://www.southpole.com/blog/the-hitchhikers-guide-to-the-eu-taxonomy-sfdr>> accessed 27 June 2024.

since NEMA oversees all the projects that would have an environmental impact in the country.<sup>35</sup>

### **C. Climate Change Act 2016**

This Act provides the regulatory framework for Kenya's response to Climate Change and for mechanisms and measures to achieve low-carbon development. The Act is required to be applied in all sectors of the Kenyan economy for both the national and county governments.<sup>36</sup> The Act, among others, provides incentives and obligations for private sector contributions towards the achievement of low carbon resilient development, promotion of low carbon technologies, improvement of efficiencies, and reduction of emissions intensity by facilitating approaches and uptake of technologies that support a low carbon, and climate-resilient development, mobilizing and transparent management of public and other financial resources for the National Climate Change Response.<sup>37</sup> Further, it puts in place the structures and framework for the implementation of the Nationally Determined Contributions (NDCs).<sup>38</sup>

### **D. Types of Carbon Trading**

Two types of carbon markets exist;

- The regulatory compliance
- Voluntary markets.

The compliance market is used by companies and governments that by law have to account for their GHG emissions.<sup>39</sup> It is regulated by mandatory national, regional, or

---

<sup>35</sup> Government of The National Policy on Climate Finance pdf <http://www.environment.go.ke/wp-content/uploads/2018/05/The-National-Climate-Finance-Policy-Kenya-2017-1.pdf> (accessed 29/6/24)

<sup>36</sup> Government of Kenya, "Kenya National Climate Change Action Plan 2013-2017", Government of Kenya Vision 2030, page 130, available at <https://cdkn.org/sites/default/files/files/Kenya-National-Climate-Change-Action-Plan.pdf> (accessed 29/6/24)

<sup>37</sup> Section 3(2)(f), (g) and (h)

<sup>38</sup> Section 5(1) and (2)

<sup>39</sup> Álvarez, L., & Coolsaet, B. (2020). Decolonizing environmental justice studies: a Latin American perspective. *Capitalism nature socialism*, 31(2), 50-69.

international carbon reduction regimes. On the voluntary market, the trade of carbon credits is on a voluntary basis.<sup>40</sup>

The size of the two markets differs considerably. In 2008, on the regulated market US\$119 billion were traded, and on the voluntary market US\$704 million.<sup>41</sup>

The three Kyoto Protocol mechanisms are very important for the regulatory market: Clean Development Mechanism (CDM), Joint Implementation (JI), and the EU Trading System (ETS).<sup>42</sup>

Some countries have not legally accepted the Kyoto Protocol, but have other legally binding state and regional GHG reductions schemes. Developing countries can only participate in the CDM.<sup>43</sup>

In general, for small-scale AFOLU projects in developing countries, the voluntary market is more interesting than the regulatory market because the CDM market has quite complex procedures and methodologies for project registration and the majority of agriculture and forestry and “Reducing Emissions from Deforestation and Degradation” (REDD) projects are excluded. However, a brief introduction is given to the CDM, because some possibilities for small-scale projects (e.g. renewable energy) exist.<sup>44</sup>

Additionally, many of the established rules, Emission reductions, or sequestration must be additional to any that would occur without the project.<sup>45</sup> GHG emissions after the implementation of the project have to be lower than in the business-as-usual case and also apply to the voluntary market.<sup>46</sup>

---

<sup>40</sup> De Sousa Santos, B. (2016). Epistemologies of the South and the future. *From Eur South*, 1, 17–29. <https://doi.org/10.1080/10570310802636334> accessed on 29 June, 2024

<sup>41</sup> (Hamilton et al., 2009)

<sup>42</sup> UNEP Risoe CDM/JI Pipeline Analysis and Database, 1 September 2009, <<http://cdmpipeline.org/overview.htm>> (accessed 30/6/24)

<sup>43</sup> NFFCCC, Project 1404: “35 MW Bagasse Based Cogeneration Project” by Mumias Sugar Company Limited (MSCL), United Nations Framework Convention on Climate Change, available at <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1193228673.11/view> (accessed on 22nd February 2022).

<sup>44</sup> Gill, G. (2019). *Environmental Constitutionalism in India: Judicial Recognition and Application*.

<sup>45</sup> Hunter, D., Salzman, J., and Zaelke, D., (eds.), *International Environmental Law and Policy*, Thomson West: Foundation Press, 2007.

<sup>46</sup> Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: climate change and the discourse of environmental justice. *Wiley Interdisciplinary Reviews: Climate Change*, 5(3), 359-374.



## XI. CLEAN DEVELOPMENT MECHANISM (CDM)

Under the **Kyoto Protocol**, developing countries are not obliged to reduce their GHG emissions, whereas industrialized countries have to fulfill specified targets. They can achieve these by reducing GHG emissions in their own country; implementing projects to reduce emissions in other countries; or trading.<sup>47</sup> This means that countries that have satisfied their Kyoto obligations can sell their excess carbon credits to countries that find it more expensive to meet their targets. For developing countries, the CDM is of most interest among the regulatory market mechanisms.

An industrialized country implements an emission reduction project in a developing country. This can be an afforestation, an energy efficiency, or a renewable energy project. Because of the uptake or savings of GHGs, carbon credits (CER) are generated. These belong to the industrialized country and will be used to compensate for some of their domestic GHG emissions and reach their emission targets. The projects support sustainable development within the host country, as a new – additional project is created which helps to slow down global warming.<sup>48</sup> Through the project new technology is transferred to the host country, investments are made, additional jobs are created and the project reduces environmental impacts.<sup>49</sup>

## XII. VOLUNTARY MARKET

It has become very important for agriculture and forestry projects. Voluntary carbon credits (VER) are mainly purchased by the private sector. Corporate social responsibility (CSR) and public relations are the most common motivations for buying carbon credits. Other reasons are considerations such as certification, reputation, and environmental and social benefits. Some companies offer clients to neutralize their carbon emissions (e.g. British Airways offers carbon-neutral flights and Morgan Stanley provides the equivalent amount of carbon credits). The private sector can

---

<sup>47</sup> Gill, G. (2019). Environmental Constitutionalism in India: Judicial Recognition and Application.

<sup>48</sup> Temitope, R. (2010). The judicial recognition and enforcement of the right to environment: differing perspectives from Nigeria and India. *NUJS L. Rev.*, 3, 423.

<sup>49</sup> Ako, R. T. (2009). Nigeria's Land Use Act: an anti-thesis to environmental justice. *Journal of African Law*, 53(2), 289-304.

either purchase carbon credits directly from projects and companies (e.g. Eco securities) or from carbon funds (e.g. The World Bank BioCarbon Fund).<sup>50</sup>

The story behind the credits plays a crucial role in these markets. AFOLU projects are usually valued highly for their social and environmental benefits, as they deal with people's livelihoods and the protection of important ecosystems.<sup>51</sup>

### **A. The Business of Carbon Trading**

Carbon trading is defined as a flexibility mechanism that involves purchasing or acquiring credits representing greenhouse gas reductions in other countries.<sup>52</sup> The goal of carbon trading is to make it easier for companies and governments to meet emission reduction targets. It is usually undertaken in two main forms. These are, first, the 'cap and trade' form, and secondly, the 'offsetting' form.<sup>53</sup>

### **B. Cap and Trade Form**

This form of carbon trading is also known as the carbon market form. It occurs when a government or intergovernmental body sets an overall legal limit on emissions (the cap) over a specific period of time, and grants a fixed number of permits to those releasing the emissions.<sup>54</sup> The polluting entity must hold enough permits to cover the emissions it releases. In the event one polluter does not use all its permits, then it can trade the "surplus" permits with another entity that has already exhausted all its permits and needs more to continue emitting, without exceeding the legal limit.<sup>55</sup>

---

<sup>50</sup> Lohmann, Larry (ed.) (2006) Carbon trading: A critical conversation on climate change, privatisation and power, Uppsala: Dag Hammarskjöld Foundation.

<sup>51</sup> Mitchell, Timothy (2007) 'The Properties of Markets', in Donald MacKenzie (ed.) *Do Economists Make Markets? On the performativity of economics*, pp 244-275, Princeton: Princeton University Press.

<sup>52</sup> UNFCCC, "40MW Bagasse Based Cogeneration at West Kenya Sugar Limited", UNFCCC, available at <https://cdm.unfccc.int/Projects/Validation/DB/BMNRNLA6HT98AYZ0RAM1XXMNYRTY7G/view.html> (accessed on 24nd June 2024)

<sup>53</sup> Anaebo, O. K., & Ekhaton, E. O. (2015). Realising substantive rights to healthy environment in Nigeria: A case for constitutionalisation. *Environmental Law Review*, 17(2), 82-99.

<sup>54</sup> Kaufman N., "Carbon Tax vs. Cap-and-Trade: What's a Better Policy to Cut Emissions?" World Resources Institute, 30th June, 2024.

<sup>55</sup> Kill J., Ozinga S., Pavett S., Wainwright R., *Trading Carbon: How it Works and Why it is Controversial*, FERN, 2022, available at <https://www.unredd.net/documents/redd-papers-and-publications-90/other-sources-redd-papers-and-publications/understanding-redd-climate-change-840/climate-change-850/2961-trading-carbon-how-it-works-and-why-it-is-controversial-2961.html>

### XIII. CONCLUSION

In Conclusion carbon trading, development, and climate justice within the past few years, there has been increasing talk about climate justice, not only among grassroots activists but also among environmental organizations, policymakers, governments, UN delegates, and trade associations.<sup>56</sup> However climate justice is defined, it is often assumed that it is all about re-energizing or reforming development and investment in the global South to steer it in a low-carbon direction, harnessing the potential of carefully constructed green markets, or making the capital flow from North to South, instead of from South to North, as part of a global warming mitigation package.<sup>57</sup>

What is less discussed are the lessons gained from more than a half century's popular and institutional experience of what development neo-liberal or otherwise, reformed or otherwise does.<sup>58</sup> What does the project of a just solution to the climate crisis become once it is associated with or incorporated into an economic development or carbon market framework? This article has suggested that carbon trading, as part of the 'climate development' package that has become entrenched at national and international levels over the past ten years, is organized in ways that make it more

---

(accessed on 30th June, 2024). UNFCCC, "40MW Bagasse Based Cogeneration at West Kenya Sugar Limited", UNFCCC, available at <https://cdm.unfccc.int/Projects/Validation/DB/BMNRNLA6HT98AYZ0RAM1XXMNYRTY7G/view.html> (accessed on 24th June 2024)

<sup>55</sup> Anaebo, O. K., & Ekhaton, E. O. (2015). Realising substantive rights to healthy environment in Nigeria: A case for constitutionalisation. *Environmental Law Review*, 17(2), 82-99.

<sup>55</sup> Kaufman N., "Carbon Tax vs. Cap-and-Trade: What's a Better Policy to Cut Emissions?" World Resources Institute, 30th June, 2024.

<sup>55</sup> Kill J., Ozinga S., Pavett S., Wainwright R., *Trading Carbon: How it Works and Why it is Controversial*, FERN, 2022, available at <https://www.unredd.net/documents/redd-papers-and-publications-90/other-sources-redd-papers-and-publications/understanding-redd-climate-change-840/climate-change-850/2961-trading-carbon-how-it-works-and-why-it-is-controversial-2961.html> (accessed on 30th June, 2024)

<sup>56</sup> Holifield, Ryan, Jayajit Chakraborty, and Gordon Walker, eds. *The Routledge handbook of environmental justice*. Routledge, 201

<sup>57</sup> Knoble, C., & Yu, D. (2023). *Environmental justice: An evolving concept in a dynamic era*. Sustainable Development.

<sup>58</sup> Kim Bouwer, 'The influence of human rights on climate litigation in Africa' (2022) 13 (1) *Journal of Human Rights and the Environment* 157-177,

difficult even to see what the central issues of climate justice are, much less to take action on them.<sup>59</sup>

By concealing and undermining the knowledge and analysis needed to respond to global warming, by obscuring how needed social and technological changes will take place, by generating new and dangerous equivalences, by participating in neo-colonial mythologies, and by befuddling the concerned middle-class public, carbon markets are interfering with effective and democratic approaches to global warming.<sup>60</sup> Calls for pursuing climate justice within a carbon trading framework, like other essentially glib calls for combining 'environment' and 'development', neither help clarify the problems nor provide a useful framework for addressing them. It is time to bring this discussion back down to earth.<sup>61</sup>

#### XIV. REFERENCES

- Act No. of 209
- Ako, R. (203). Environmental justice in developing countries: perspectives from Africa and Asia-Pacific. Routledge
- Ako, R. T. (2009). Nigeria's Land Use Act: an anti-thesis to environmental justice. *Journal of African Law*, 53(2), 289-304.
- Álvarez, L., & Coolsaet, B. (2020). Decolonizing environmental justice studies: a Latin American perspective. *Capitalism Nature socialism*, 3(2), 50-69.
- Anaebo, O. K., & Ekhaton, E. O. (205). Realizing substantive rights to healthy environment in Nigeria: A case for constitutionalization. *Environmental Law Review*, 7(2), 82-99.

---

<sup>59</sup> • G. N. Gill 'the National Green Tribunal of India: A Sustainable Future through the Principles of International Environmental Law' (2014) 16(3) *Environmental Law Review* 183.

<sup>60</sup> E. Akintayo, 'A Good Thing from Nazareth? Stemming the Tide of Neo-liberalism against Socio-economic Rights-lessons from the Nigerian Case of Bamidele Aturu v Minister of Petroleum Resources and Others : case reviews' (2014) 15(2) *ESR Review: Economic and Social Rights in South Africa*

<sup>61</sup> Dove, Michael 'Theories of Swidden Agriculture and the Political Economy of Ignorance', *Agroforestry Systems* (1983) 1: 95-103.

- Anaebo, O. K., & Ekhaton, E. O. (2015). Realizing substantive rights to a healthy environment in Nigeria: A case for constitutionalization. *Environmental Law Review*, 7(2), 82-99.
- Anaebo, O. K., & Ekhaton, E. O. (2015). Realizing substantive rights to a healthy environment in Nigeria: A case for constitutionalization. *Environmental Law Review*, 7(2), 82-99.
- Chai Shadrack, 'The Inception of Carbon Credits and Offsets in the Climate Action Agenda of the United Nation' <[https://www.academia.edu/6377252/The\\_inception\\_of\\_carbon\\_credits\\_and\\_offsets\\_in\\_the\\_Climate\\_Action\\_agenda\\_of\\_the\\_United\\_Nation](https://www.academia.edu/6377252/The_inception_of_carbon_credits_and_offsets_in_the_Climate_Action_agenda_of_the_United_Nation)> accessed 26 June 2024.
- De Sousa Santos, B. (2016). Epistemologies of the South and the future. From *Eur South*, 7-29. <https://doi.org/10.080/057030802636334> accessed on 29 June 2024
- Dove, Michael (1983) 'Theories of Swidden Agriculture and the Political Economy of Ignorance', *Agroforestry Systems*: 95-03.
- Dove, Michael (1983) 'Theories of Swidden Agriculture and the Political Economy of Ignorance', *Agroforestry Systems*: 95-03.
- Dove, Michael 'Theories of Swidden Agriculture and the Political Economy of Ignorance', *Agroforestry Systems* (1983): 95-03.
- E. Akintayo, 'A Good Thing from Nazareth? Stemming the Tide of Neoliberalism against Socio-economic Rights-lessons from the Nigerian Case of Bamidele Aturu v Minister of Petroleum Resources and Others: case reviews' (2014) 5(2) *ESR Review: Economic and Social Rights in South Africa*
- Ekhaton, E.O. (2014). Improving access to environmental justice under the African Charter on Human and Peoples' rights: the roles of NGOs in Nigeria. *African Journal of International and Comparative Law*, 22(), 63-79.
- Ferguson, James (1990) *The Anti-Politics Machine: 'Development', DE politicization, and Bureaucratic Power in Lesotho*, Cambridge: Cambridge University Press.

- Ghosh, Soumitra and Jutta Kill (forthcoming) *The Carbon Market in India*, Kolkata: National Forum of Forest Peoples and Forest Workers.
- Gill, G. (2019). *Environmental Constitutionalism in India: Judicial Recognition and Application*.
- Gill, G. (2019). *Environmental Constitutionalism in India: Judicial Recognition and Application*.
- Government of Kenya, "Kenya National Climate Change Action Plan 203-
- Government of The National Policy on Climate Finance pdf <http://www.environment.go.ke/wp-content/uploads/2018/05/The-National-Climate-Finance-Policy-Kenya-2018-.pdf> (accessed 29/6/24)
- Hobart, Mark (ed.) (1993) *An Anthropological Critique of Development: The growth of ignorance*, London: Routledge
- Holifield, Ryan, Jayajit Chakraborty, and Gordon Walker, Eds. *The Routledge handbook of environmental justice*. Routledge, 20
- Hunter, D., Salzman, J., and Zaelke, D., (eds.), *International Environmental Law and Policy*, Thomson West: Foundation Press, 2007.
- Kaufman N., "Carbon Tax vs. Cap-and-Trade: What's a Better Policy to Cut Emissions?" World Resources Institute, 30th June, 2024.
- Kaufman N., "Carbon Tax vs. Cap-and-Trade: What's a Better Policy to Cut Emissions?" World Resources Institute, 30th June, 2024.
- Kill J., Ozinga S., Pavett S., Wainwright R., *Trading Carbon: How it Works and Why it is Controversial*", FERN, 2022, available at <https://www.unredd.net/documents/redd-papers-and-publications-90/other-sources-redd-papers-and-publications/understanding-redd-climate-change-840/climate-change-850/296-trading-carbon-how-it-works-and-why-it-is-controversial-296.html> (accessed on 30th June 2024). UNFCCC, "40MW Bagasse Based Cogeneration at West Kenya Sugar Limited",
- Kill J., Ozinga S., Pavett S., Wainwright R., *Trading Carbon: How it Works and Why it is Controversial*", FERN, 2022, available at <https://www.unredd.net/documents/redd-papers-and-publications-90/other-sources-redd-papers-and-publications/understanding-redd->

climate-change-840/climate-change-850/296-trading-carbon-how-it-works-and-why-it-is-controversial-296.html (accessed on 30th June 2024

- Kim Bouwer, 'The influence of human rights on climate litigation in Africa' (2022) 3 () *Journal of Human Rights and the Environment* 57-77,
- Knoble, C., & Yu, D. (2023). Environmental justice: An evolving concept in a dynamic era. *Sustainable Development*.
- Lohmann, Larry (1998b) *Missing the Point of Development Talk: Reflections for activists*, Sturminster Newton: The Corner House
- Lohmann, Larry (2000) *Democracy or Carbocracy? Carbon trading and the future of the climate debate*, Sturminster Newton: The Corner House
- Lohmann, Larry (ed.) (2006) *Carbon trading: A critical conversation on climate change, privatization, and power*, Uppsala: Dag Hammarskjöld Foundation.
- Lohmann, Larry (forthcoming) 'Toward a Different Debate in Environmental Accounting: The cases of carbon and cost-benefit', *Accounting Mitchell, Timothy* (2007) 'The Properties of Markets', in Donald MacKenzie (ed.) *Do Economists Make Markets? On the performativity of economics*, pp 244-275, Princeton: Princeton University Press, *Organizations and Society* doi:0.06/j.aos.2008.03.002.
- Mitchell, Timothy (2007) 'The Properties of Markets', in Donald MacKenzie (ed.) *Do Economists Make Markets? On the performativity of economics*, pp 244-275, Princeton: Princeton University Press.
- NFCCC, Project 404: "35 MW Bagasse Based Cogeneration Project" by Mumias Sugar Company Limited (MSCL), United Nations Framework Convention on Climate Change, available at <http://cdm.unfccc.int/Projects/DB/TUEV-SUED93228673./view> (accessed on 22nd February 2022).
- Pigg, Stacy Leigh (1992) 'Inventing Social Categories through Place: Social representations and development in Nepal', *Comparative Studies in Society and History* 34(3): 49-53.

- Redman, Janet (2008) World Bank: "Climate profiteer, Washington, DC: Institute for Policy Studies"
- Ronald H Coase, "The Problem of Social Cost" (1960) Vol III LE 23,
- Schlosberg, D., & Collins, L. B. (2014). "From environmental to climate justice: climate change and the discourse of environmental justice." *Wiley Interdisciplinary Reviews: Climate Change*, 5(3), 359-374.
- Section 3(2)(f), (g) and (h)
- Section 5(1) and (2)
- Student at the University of Nairobi, Kenya
- Temitope, R. (2000). "The judicial recognition and enforcement of the right to environment": "Differing perspectives from Nigeria and India." *NUJS L. Rev.*, 3, 423.
- UNEP Risoe CDM/JI Pipeline Analysis and Database, September 2009, <<http://cdmpipeline.org/overview.htm>> (accessed 30/6/24)
- UNFCCC, "40MW Bagasse Based Cogeneration at West Kenya Sugar Limited",
- World Bank (2007) State and Trends of the Carbon Market 2007, Washington, DC: World Bank.
- 207", Government of Kenya Vision 2030, page 30, available at <https://cdkn.org/sites/default/files/files/Kenya-National-Climate-Change-Action-Plan.pdf> (accessed 29/6/24) NYRTY7G/view.html (accessed on 24nd June 2024)
- UNFCCC, available at <https://cdm.unfccc.int/Projects/Validation/DB/BMNRNLA6HT98AYZORAMXXM>