

Building Resilient Climate: EAC Legal Responses to Climate Change as a Pathway to Sustainable Development

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Abstract

In response to the climate change issue, which is now the most severe problem affecting the environment and people's livelihoods, as well as the economy of most regions. The East African Community (EAC) has set up a legal and policy framework for addressing climate change-related issues affecting sustainable development. Despite the EAC regional laws, there is still a persistent threat of climate change in the region, thereby limiting sustainable development as it concerns the agricultural and other economic sectors. Hence, the research aims to make a detailed examination of the EAC regional climate change laws from the perspective of their scope and effectiveness, in addressing climate change and their compatibility with the Sustainable Development Goals (SDGs), and to propose legal reforms together with other options. The research is conducted using a doctrinal approach which follows the PRISMA framework and meticulously surveys EAC treaties, protocols, policies, and related scholarly literature. The results indicate that EAC regional laws are increasingly demonstrating sustainability, cooperation, and environmental protection characteristics, thereby becoming closer to the SDGs 13, 15, and 17. Additionally, if the law is improved to have more effect, paths for implementation, improving monitoring systems, and further engagement in SDG blending, it will definitely aid sustainable development, irrespective of climate change. The research concludes with the proposal of more profound harmonisation, more explicit implementation mechanisms, and more robust institutional coordination at the regional level.

Keywords: Climate Change, Sustainable Development, Legal, EAC

1. Introduction

The law may not be able to order the winds and the rains, but it can still prepare or unprepared the society for the coming of such forces¹. Such a thought clearly reveals the legal governance's main function in the climate change issue. The East African Community (EAC) has become the victim of climate change as a result of its environmental pollution, which is caused mainly by rapid urbanization, industrial activities, deforestation, and unsustainable resource exploitation. Rising temperatures, changing rainfall patterns, and degradation of the environment are the three main factors that are threatening the region's ecological balance more and more each day². This case has a clear implication of the need for a common legal and institutional response at the regional level. Pollution and other environmental factors in the EAC have led to an increase in greenhouse gases and at the same time, have reduced the earth's natural ability to absorb carbon, which has resulted in the occurrence of floods, excessive droughts, and disruption of ecosystems. The impact of climate change is not confined to one nation but extends to the adjacent countries, where it influences the shared lakes, animal migration routes, and even the climatic conditions³. By virtue of its cooperation and integration philosophy, the EAC has thus been able to resolve these cross-border problems by developing a common environment and climate governance system⁴.

The negative impacts of climate change on East African Community (EAC) development are extensive and predominantly in agriculture, food security and livelihoods. Climate change has caused a decrease in agricultural productivity globally, thus resulting in an upsurge of poverty in rural areas and loss of security for the people dependent on the climate, hence making them more susceptible⁵. However, the damage to the infrastructure caused by flooding and severe weather events is considered a constraint to development activities, thereby necessitating a shift of government resources from long-term growth to emergency management. In addition, climate change impacts public health, water security, and energy sustainability, which are the main pillars of sustainable development, besides the degradation of the environment⁶. All of these problems are likely to cause social unrest and hinder the economic integration of the region. The impacts mentioned above are an indication that the EAC is not just capable of but also in need of

¹ Marcelo Gomes, 'Climate Change and Aquatic Phytoremediation of Contaminants: Exploring the Future of Contaminant Removal' (2024) 93(9) *Phyton* 2127

² Kabwe Nkongolo, John B Mukalay, Antoine K Lubobo and Paul Michael, 'Soil Microbial Responses to Varying Environmental Conditions in a Copper Belt Region of Africa: Phytoremediation Perspectives' (2024) 13(1) *Microorganisms* 31

³ Beatrice Omonike Otunola and Paidamwoyo Mhangara, 'Green Remediation of Environmental Pollution in Africa: Challenges and Opportunities' (2025) 35(3) *Remediation Journal* e70019

⁴ Solomon W Newete and Marcus J Byrne, 'The Capacity of Aquatic Macrophytes for Phytoremediation and Their Disposal with Specific Reference to Water Hyacinth' (2016) 23(11) *Environmental Science and Pollution Research* 10630–10643

⁵ Jane Alexander Ruley and others, 'Assessment of Plants for Phytoremediation of Hydrocarbon-Contaminated Soils in the Sudd Wetland of South Sudan' (2019) 65(9) *Plant, Soil & Environment*

⁶ Divine N Tarla and others, 'Phytoremediation and Bioremediation of Pesticide-Contaminated Soil' (2020) 10(4) *Applied Sciences* 1217

reinforcing its ability to think of climate resilience as a factor for sustainable development⁷.

In order to deal with these issues, the EAC has created a set of regional legal and policy instruments for environmental protection, climate change cooperation, and sustainable development⁸. However, the ever-increasing size and complexity of the climate-related problems point to a question of whether the legal responses are still adequate, coherent, and operationally effective⁹. The problem is not that there are no regional norms, but rather that there is a need to empower the existing norms with the capacity to effectively deal with the changing climate risks developmentally¹⁰. This research is set in the context of the EAC legal response to climate change and its connection to the sustainable development path. It aims to review the current EAC regional legislation on climate change, evaluate its conformity with sustainable development goals, and identify ways to improve the regional legal frameworks to support the Community's coordinated, resilient, and sustainable climate governance.

2. Method

The study adopts a doctrinal research methodology and relies on the meta-analysis that draws from the PRISMA framework that is systematically applied in data analysis. In this regard, all the legal materials relating to the topic were sifted through and selected in an organized manner. The sources of primary doctrine were accessed through the systematic searches of the EAC legal instruments comprising the EAC Treaty, protocols, strategies, policy frameworks, and official documents to mention some, which were all related to climate change, environmental protection, and sustainable development. The identification and screening phases were primarily directed towards regional materials, and the eligibility criteria guaranteed that the materials were pertinent to climate governance and the EAC's goals in relation to the SDGs. This strategy not only solidified the method but also diminished the selection bias and assured comprehensive coverage of the trustworthy regional legal sources. The primary research materials are therefore presented in a diagrammatic flow below:

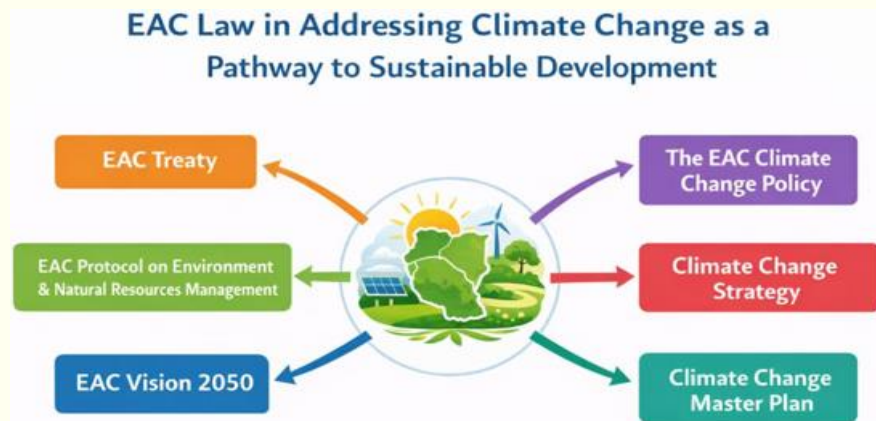
Figure 1: Primary research data obtained or relied on

⁷ Ahmed MN Masoud, Amani Alfarra and Sabrina Sorlini, 'Constructed Wetlands as a Solution for Sustainable Sanitation' (2022) 14(20) *Water* 3232

⁸ Masika Sarah Bino and Paul Atagamen Aidonojie, 'Achieving Environmental Sustainability through Carbon Neutrality in Uganda' (2025) 17 *Cogito: Multidisciplinary Research Journal* 72

⁹ Shambhu Katel and others, 'Salicornia as a Salt-Tolerant Crop' (2023) 5(2) *Turkish Journal of Food and Agriculture Sciences* 55–67

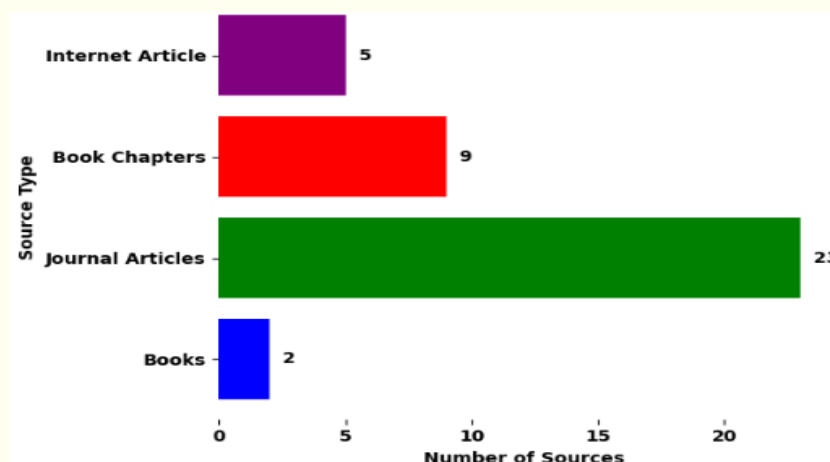
¹⁰ Joyprakash Naskar and others, 'Climate Change and Soil Resilience' (2025) 29(4) *Journal of Hazardous, Toxic, and Radioactive Waste* 03125002



Sources: Design by authors based on data obtained

Furthermore, the study also relied on secondary research material; these secondary materials were identified via the PRISMA search that was in line with the guidelines. The researchers mainly depended on the peer-reviewed journal articles, book chapters, and policy analyses and reports coming out of international and regional organizations that are involved in the climate governance and sustainable development of EAC, which are the sources of the secondary materials. The databases used for searching included HeinOnline, Google Scholar, and regional legal repositories, where the search was systematic and was based on predefined keywords and inclusion criteria. The secondary research materials are therefore presented in a diagrammatical flow below:

Figure 2: Secondary Sources of research materials



Source: Design by authors based on data obtained

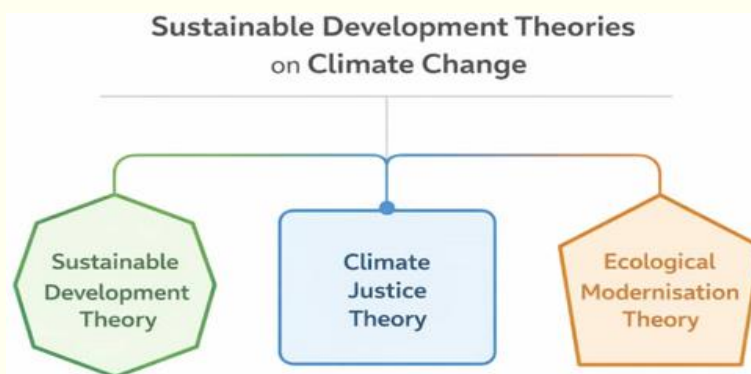
After the screening and quality appraisal process, the selected materials were subjected to qualitative doctrinal analysis, which consisted of interpretative, comparative and contextual evaluation of legal norms and principles. The analysis revealed the coherence, normative scope and alignment of the EAC regional laws with the SDGs. The method applied resulted in the systematic synthesis of the legal reasoning and policy objectives, which in turn helped the normative conclusions on the need for strengthening of regional cooperation in law and policy areas.

3. Analysis or Discussion

3.1. Sustainable Development Theoretical Framework on Climate Change

Legal and developmental challenges caused by climate change are quite complicated and at the same time, very much needing the correct theoretical support to the impacted areas¹¹. The East African Community would benefit from the proper implementation of legal theories as they would be able to set up a sustainable future considering the environment, society, and economy through integrated and progressive measures¹². The theories are thus demonstrated in the following visual flow:

Figure 3: Sustainable Development Theories on Climate Change



Sources: Design by authors base data obtain

Sustainable Development Theory is among the theoretical frameworks that can be used in the case of the negative impact of climate change on the East African Community, which addresses division of environmental protection, economic development, and social justice¹³. The theory sees climate change as an issue not only of nature but of human development as well, thus calling for the legal systems to cohere in the integration of ecological sustainability in development¹⁴. Under the EAC context, Sustainable Development Theory could promote the establishment of regional laws that would allow the eco-friendly economic integration, responsible resource management and intergenerational equity. It emphasises the requirement of legal instruments that are responsive to the climate and, at the same time working

¹¹ Paul Atagamen Aidonojie, 'Environmental Hazard: The Legal Issues Concerning Environmental Justice in Nigeria' (2023) 3(1) *Journal of Human Rights, Culture and Legal System* 17–32

¹² Kuldeep Baudh, Bhaskar Singh and John Korstad, *Phytoremediation Potential of Bioenergy Plants* (Springer 2017)

¹³ Tamirat Wato and Mekides Amare, 'Opportunities and Challenges of Scaling up Agroforestry Practices in Sub-Saharan Africa' (2020) 41(3) *Agricultural Reviews*

¹⁴ Paul Atagamen Aidonojie and others, 'Regulations, Initiatives, and Legislation Regarding the Management of Plastic Waste' in *Plastic and the COVID-19 Pandemic* (Springer Nature 2024) 229–246

on the side of development objectives without overstepping the allowed environmental limits¹⁵. By promoting the sustainability principles into the institutional framework of the regional climate governance, the previously mentioned theory paves the way for the enactment of laws that would bring the green growing, shielding the already vulnerable communities, and ensuring that the development paths do not deviate from the future resilience across the EAC¹⁶.

An additional framework that can be relied on is the Climate Justice Theory, which is concerned mainly with the issues of fairness, equity, and the sharing of responsibilities among different parties in the fight against climate change¹⁷. One of the main points of this theory is that the most vulnerable groups, such as smallholder farmers, women, and pastoral communities, are the first to feel the climate impacts in the EAC region, even though their contribution to global emissions is almost nothing. Climate Justice Theory directs legal responses regionally by demanding equitable burden-sharing, inclusive decision-making, and the protection of the climate-vulnerable groups¹⁸. The EAC lays the groundwork for the development of legal structures that are fully suited to the fields of climate change, resilience, and the accessibility of climate finance. Besides this, the EAC has made the principle of regional solidarity a practical reality, which in turn has paved the way for the creation of community legal instruments that not only address the issues arising from the injustices caused by climate change but also incorporate social justice as a critical factor in the process of sustainable development¹⁹.

The Ecological Modernisation Theory is the third and final framework that supports the argument stating that climate change mitigation and adaptation, as well as economic development, can occur simultaneously through innovations in the different areas of law, institutions, and technology²⁰. The theory further maintains that if strict environmental regulations are imposed and compliance is ensured, then the environment will be improved as the regulations will encourage clean production, renewable energy, and sustainable technologies. The EAC is required to adopt the Ecological Modernisation Theorem in proving the validity of the regional legal frameworks that are in favor of the development of low-carbon, green

¹⁵ Duyen Thi Cam Nguyen and others, 'The Sunflower Plant Family for Bioenergy, Environmental Remediation, Nanotechnology, Medicine, Food and Agriculture' (2021) 19(5) *Environmental Chemistry Letters* 3701–3726

¹⁶ Ibid

¹⁷ Gordana Gajic, Pallavi Sharma, Madhumita Roy and Vimal Chandra Pandey, *Adaptive Phytoremediation Practices: Resilience to Climate Change* (Elsevier 2022)

¹⁸ Misery Mulele Nabuyanda and others, 'Investigating Co, Cu, and Pb Retention and Remobilization' (2019) 236 *Journal of Environmental Management* 510–518

¹⁹ Jagdish Chander Dagar, Sharda Rani Gupta and Gudeta Weldesemayat Sileshi, 'Urban and Peri-Urban Agroforestry' in *Agroforestry for Sustainable Intensification of Agriculture in Asia and Africa* (2023) 89–118

²⁰ Paul Atagamen Aidonojie, 'Restorative Justice' in *Elgar Encyclopedia of Energy Economics* (Edward Elgar 2025) 404–409

infrastructure and the modernisation of agriculture to be climate-smart²¹. One of these points is the function of the legal framework in directing the market and investments towards practices that are not economically integrated but are environmentally sound. Thus, by combining climate regulation with innovation and regional economic cooperation, the EAC legal responses would have a practical way of not only confronting climate change but also continuing along the path of achieving sustainable development goals²².

Theoretical frameworks suggest that the main factors for EAC's effective legal responses to climate change should focus more on sustainability, equity, and innovation combined. The implementation of such factors in the region's legal systems would eventually provide the normative reference for climate governance bolstering, resilience adoption, and sustainable development through the coordinated use of just, adaptive, and enhancing legal approaches, among other things.

3.2. The Effects of Climate Change on Sustainable Development in EAC

The issue of climate change in the East African Community (EAC) is already an environmental problem that has measurable effects on both ecological and human systems. The global climate variability is associated with the increase in the frequency and intensity of droughts, floods, and irregularity in the seasonal patterns, which thereby contribute to the water shortage, land degradation, and the loss of biodiversity in the region²³. The EAC Secretariat has reported that these developments hurt food and energy security, tourism revenues, and have led to more conflicts over natural resources. In the Eastern and Southern African regions²⁴. There are about 116 million people who could be affected in having access to safe drinking water, and the situation is made worse by climate-driven crises in rainfall and groundwater depletion. These developments are an indication that climate change is not a hypothetical scenario but a reality with environmental impacts that trickle down to the majority of the EAC population²⁵.

Climate change's adverse effects in the EAC are made worse by socio-economic vulnerabilities. Agriculture is the mainstay of the EAC economies, and it contributes up to 25–40% of GDP and employs a large part of the workforce; it is the most

²¹ Michael T Timko and others, 'Thinking Globally, Acting Locally in the 21st Century' (2024) 27(10) *iScience*

²² Cosmos Nike Nwedu, 'Exploring the Legal and Policy Impact of the Russia-Ukraine War on Energy Security' (2024) 6(1) *Kampala International University Law Journal* 27–49

²³ Oxfam in Africa, "Hunger skyrockets by nearly 80 percent in Eastern and Southern Africa over past five years amidst worsening water crisis" https://africa.oxfam.org/latest/press-release/hunger-skyrockets-nearly-80-percent-eastern-and-southern-africa-over-past-five?utm_source=chatgpt.com, accessed 20th November, 2025

²⁴ EAC "Climate Change", https://www.eac.int/environment/climate-change?utm_source=chatgpt.com, accessed 20th November, 2025

²⁵ Ibid

affected by the climate²⁶. Unreliable seasonal rains and floods destroy crops, reduce food supply and raise prices. The FAO forecasts that more than 45 million people in the East African region suffer from undernourishment, partly due to the failure of crops, which are climate-related²⁷. The drought that occurred from 2021 to 2023 in Somalia had a dramatic impact on about 7.8 million people in a lot of ways; for instance, many were displaced, and some experienced acute food insecurity²⁸. The impacts of climate change on agriculture, for instance, multiply the already existing developmental problems like poverty and lack of infrastructure, and thereby they put more pressure on the region's resilience.

The adverse effects of climate change in the EAC also cover water and food security, besides agriculture. The repeating droughts have resulted in a mounting number of people oppressed under the crisis levels of hunger; substantial amounts of people in the combined regions of Kenya and Uganda are also facing acute food insecurity as a result of drought²⁹. Unpredictable rainfall and extended dry periods disturb the water cycle, and hence the availability of fresh water for home usage, watering livestock, and agriculture is also reduced. This situation has health, sanitation, and economic repercussions directly, especially for rural populations that rely on rain-fed agriculture³⁰. In addition, deforestation, which is a phenomenon with considerable annual losses combined with forest degradation, leads to a reduction in carbon storage capacity and climate vulnerability. These climate-related changes in agriculture and the like hamper the EAC in reaching the sustainable development goals in the areas of poverty reduction, health, and environmental sustainability³¹.

On May 21, 2024, Kinshasa witnessed peaceful protests over the skyrocketing cost of living. Just a year before, in 2023, similar grievances had led to deadly riots in Kenya³². Some analysts argue that these protests might seem mainly political, but, in fact, they are very much connected to the high living costs and extreme weather that have made people food insecure. Climate unpredictability in the form of erratic rains, long periods of drought, and flooding has greatly reduced agricultural

²⁶ Africa Research Impact, "Assessing the Effectiveness of Climate Change Adaptation Interventions in East Africa" https://www.arin-africa.org/wp-content/uploads/2025/03/FINAL-FCDO-REPORT-.pdf?utm_source=chatgpt.com, accessed 25th November, 2025

²⁷ Sunday Precious, "Climate Change and Crop Loss in East Africa", https://agritechdigest.com/climate-change-and-crop-loss-in-east-africa/?utm_source=chatgpt.com accessed 25th November, 2025

²⁸ Ibid

²⁹ Folasade Folake Aare, Olusola Raphael Olorunfemi and Gogo George Ntor, 'Legal Frameworks for Single-Use Plastic Management' (2024) 6(1) *Kampala International University Law Journal* 63–85

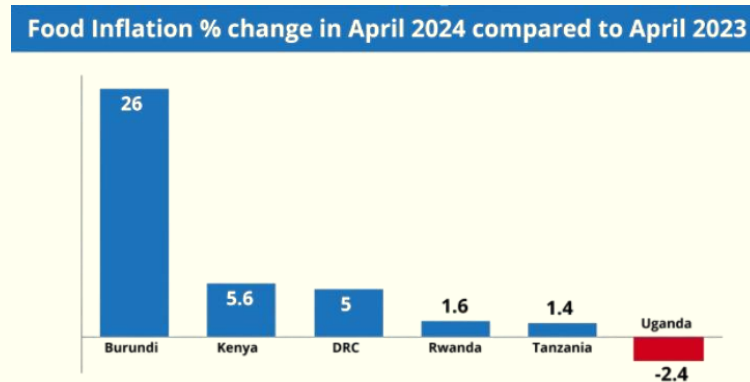
³⁰ Paul Atagamen Aidonojie, 'Legal Compliance for Energy' in *Elgar Encyclopedia of Energy Economics* (Edward Elgar 2025) 297–301

³¹ Esther Christine Kisubi and others, 'Utilitarianism in Uganda's Oil and Gas Sector' (2024) 6(1) *Kampala International University Law Journal* 190–207

³² Daniel Samson, "Climate Change: From floods to droughts, struggles of an East Africa under threat of a food crisis", https://nukta.co.tz/climate-change-from-floods-to-droughts-struggles-of-an-east-africa-under-threat-of-a-food-crisis?utm_source=chatgpt.com, accessed 25th November, 2025

production, thus raising prices of food that are already beyond the reach of many³³. The food inflation that plagued the Eastern Africa region in 2024 was a mirror that showed the crises of East African countries, most of which, except Uganda, were recording steep increases in prices.

Figure 4: Food inflation causes by climate change adverse effect



Sources: Daniel Samson

The EAC climate change pressures have led to a situation where the economy is not only impacted by the direct costs of climate change on GDP and long-term growth. If major infrastructure is built in areas where flooding occurs, the repair cost will increase, and the public investment will be diverted from developmental projects to disaster response³⁴. In Kenya, the floods that have occurred in the past have rendered a great deal of land unusable for agriculture and have also damaged infrastructure, which has affected the transport, trade, and agriculture sectors economically³⁵. The region's impoverished pastoralists and producers are now suffering greatly due to the loss of cows, which are often estimated in billions of dollars, as the situation is the same for other East African countries. Moreover, the annual climate finance to the East African region is only in the range of a few hundred million dollars, while the requirement is about US\$53.3 billion³⁶. The resulting pressure on public finances exposes the already weak case against climate change as a factor in sustainable development.

The EAC's human aspect of climate change includes factors such as displacement, health, and social issues. For instance, less rainfall, flooding, and high temperatures are major internal dislocation causes, of which Somalia and other countries are good examples, where people's movement is due to the imposition of harsh climate

³³ Ibid

³⁴ Alex Ronald Mwangi, 'Climate Change: Land Use and Water Management in Uganda' in *Handbook of Climate Change Management* (2021) 1–27

³⁵ Suthirat Kittipongvises and Chongrak Polprasert, 'Impacts of Climatic Stress on Phyto-Bioremediation' in *Phytoremediation for Environmental Sustainability* (2022) 201–230

³⁶ Paul Atagamen Aidonojie and Osikemekha Anthony Anani, 'Legislative Framework in Addressing Emergent Pollutants' in *Emergent Pollutants in Freshwater Plankton Communities* (CRC Press 2024) 163–176

conditions³⁷. The resulting displacements put a lot of pressure on the social services, cause conflicts and disputes over the limited resources, and increase the chance of violence. Still, people living in areas affected by the changing weather conditions are denied their basic right to food due to the inability of the farmers to grow the crops or keep the animals³⁸, and this situation is especially bad for the infants and young children who suffer malnutrition, thus causing the human development indices to go down. If nothing is done about these issues, the social and economic impacts will continue to be interlinked, and therefore, the regional development initiatives will be hindered³⁹. Thus, the EAC region's fight against climate change is important for the overall human existence, and the goal will be to chain even future generations to the resilient development pathways.

3.3. EAC Legal Response to Climate Change: A Pathway to Sustainable

The East African Community (EAC) Treaty⁴⁰ implicitly but remarkably provides legal grounds for the governance of the regional climate. Article 5 framed sustainable development as a major goal by connecting economic integration with environmental protection through Article 5(3)(c), imposing a comprehensive use of resources and proper environmental care. By doing so, the Treaty took a wide, programmatic road instead of slapping concrete, enforceable climate obligations on Partner States. Article 7(1)(b)⁴¹, which states that an enabling environment is to be created through policies and infrastructure conducive to the situation, does not mention standards or procedures for compliance with climate-sensitive issues. This openness in norms provides the advantage of flexibility, but at the same time reduces accountability in the fight against climate change. In the same manner, Article 103(1)(b)⁴² mentions science and technology as the movers of development, but it does not explicitly mention climate innovation and low-carbon transitions. So, although the Treaty makes sustainability the main value, its connection with climate is still indirect and heavily dependent on protocols, national actions, and the like in passing objectives into the realm of climate-active responses.

Articles 111 and 112 of the treaty are the most overtly treaty-level replies to environmental degradation and climate risks related to EAC⁴³. Article 111 recognizes that the environment is affected by development activities and that a clean and healthy environment is a condition for sustainable development, which is

³⁷ Oluwatoyin Oyeronke Ajayi, 'Mining in Nigeria and Environmental Protection' (2023) 5(2) *Kampala International University Law Journal* 238–257

³⁸ Joan Nyika and Megersa Olumana Dinka, 'Application of Phytoremediation Principles to Remediate Air Pollutants' in *Global Challenges for the Environment and Climate Change* (2024) 55–74

³⁹ Isa Kabenge and others, 'Bioremediation Technology Potential for Management of Soil and Water Pollution in Uganda' (2017) *Journal of Environmental Protection*, 34–67

⁴⁰ East African Community (EAC) Treaty

⁴¹ Ibid

⁴² Ibid

⁴³ Ibid

very much in line with the principles of climate justice. The obligations of cooperation on transboundary pollution, hazardous waste, disaster preparedness, and ecosystem conservation (Art. 111(1)(a)–(e)) are of great significance in a region prone to floods, droughts, and the loss of ecosystems. Article 112, however, adds even more to this framework as it mandates that environmental considerations are taken into account in all economic sectors, including trade, energy, agriculture, and transportation. Still, these provisions are mainly oriented toward coordination rather than enforcement. They depend on harmonisation and policy adoption without the imposition of sanctions or the establishment of a supranational body with oversight powers. Thus, the climate governance provided for in these articles is contingent upon the political will at the national level, which places a limit on their effectiveness as binding climate response mechanisms.

The EAC Protocol on Environment and Natural Resources Management⁴⁴ characterized in a great extent the Community's legal reaction to climate change by making Treaty principles actionable. Articles 2 and 3 embrace a wide range of issues, including climate-sensitive sectors like energy, forests, wetlands, biodiversity and pollution control. Article 4 brings in modern environmental law principles such as sustainable development, public participation, environmental impact assessment, and the polluter-pays principle that are very much at the core of climate governance today. What is more, Article 6 binds Partner States to legislate uniformly and follow international environmental standards, thus connecting regional efforts with global climate regimes⁴⁵. The Protocol, however, is still hampered by institutional weaknesses. It has no clear timelines, binding emission targets or any enforcement mechanisms for non-compliance. Although a complete normative framework is provided, its effectiveness is limited by the lack of a strong supranational authority and non-uniform implementation domestically. Thus, the Protocol acts more as a coordinating and guiding tool than as a strong, enforceable regional climate regime.

The different areas of the Protocol have sector-based rules that are a lot more readily connected with the climate change mitigation and adaptation movements. To begin with, Article 19 is very much in favor of the use of renewable and alternative energy sources; thus, it is giving a legal basis for the EAC's low-carbon transitions. Another one is Article 24, which is very important as it says regionally inseparable integration when it comes to the climate-change-allied discussion; the laws on greenhouse gas mitigation, climate education, and technology transfer have to be merged. This provision connects the EAC to the international climate protocols like the Kyoto Protocol. Articles 25 and 30 are also talking about ozone protection and pollution control, respectively, which, through environmental regulation, are also reinforcing climate mitigation. The truth is that, however, the provisions are

⁴⁴ EAC Protocol on Environment and Natural Resources Management (2006)

⁴⁵ Ibid

still pretty much wishful thinking. They are not backed up with any measurable commitments, regional emission benchmarks, or binding reporting obligations. As a result, the Protocol does paint a very complete picture of the climate situation, but at the same time, the voluntary harmonization makes it unable to bring about a deep-seated change. One of the first steps that the Protocol will need to take to achieve it promises to strengthen law enforcement and regional monitoring in order to speed up the process of legal commitments being turned into effective climate action.

EAC Vision 2050⁴⁶ is a long-term, strategic instrument for planning and not a binding legal framework, but it is still indirectly acknowledgment for the whole climate governance area in the region. The Vision, by pinpointing the sub-optimal use of natural resources, inadequate energy supply, weak research and development, and environmental degradation as the main constraints to development, implicitly acknowledges that climate change is a structural threat to sustainable development. The development pillars of the Vision - particularly natural resource and environment management, agriculture, energy, and infrastructure - are all climate-sensitive sectors. However, the Vision takes a growth-oriented route that gives priority to industrialisation, infrastructure expansion, and resource exploitation without particularly stating the climate safeguards or emission limits. While it connects itself with the Sustainable Development Goals and AU Agenda 2063, Vision 2050 does not contain legally binding climate commitments, timelines, or accountability mechanisms. Therefore, climate change is perceived more as a cross-cutting development risk than a legal priority, its proper integration depending on the lower-level policies and national implementation frameworks instead of a regional legal compulsion.

The EAC Climate Change Policy⁴⁷, Climate Change Strategy, and Climate Change Master Plan together form the Community's clearest legal and policy response to climate change. The Policy sets adaptation as a regional priority that mirrors East Africa's great vulnerability, and it also acknowledges mitigation through NAMAs and low-carbon pathways (EAC Climate Change Policy 2011)⁴⁸. Article-level commitments are made real through the Strategy that offers sectoral actions, institutional arrangements, and financing mechanisms that include the suggestion of the Climate Change Coordination Unit and Climate Change Fund. The Master Plan additionally fortifies this scheme by pinpointing priority sectors, adaptation and mitigation pillars, and calculated budgetary needs. However, these instruments still mostly represent soft law⁴⁹. They do not create binding obligations, do not impose

⁴⁶ East Africa Community Vision 2050

⁴⁷ EAC Climate Change Policy (2011)

⁴⁸ Ibid

⁴⁹ Uchechukwu Esther Oloworaran, 'An Evaluation of the Legal Framework for Resolving Disputes in the Digital Ecosystem in Nigeria' (2023) 5(2) *Kampala International University Law Journal* 50–64

penalties for non-compliance, and do not have the power of supranational enforcement. Their effectiveness is thus dependent on political will, donor financing, and domestic legal incorporation. The climate regime is normatively robust, but practically it is more of a coordinating policy architecture rather than a legally coercive regional climate governance system.

3.4. Issues and Challenges

The East African Community (EAC) faces the most serious and challenging legal issues and underdeveloped areas due to climate change. The discussion will focus on the threefold limitations, that is, a legal and policy framework of the EAC that is characterised by poor governance and thereby hinders the drawing of sustainable development pathways through climate change as a key issue.

The main question in responding to climate change legally by the EAC is the unclear norm of the Treaty itself. Sustainability, environmental protection, and technology are interconnected through the integration agenda in Articles 5(3)(c), 7(1)(b), and 103(1)(b), although they are expressed in vague and lofty terms. The lack of specific climate obligations, standards, or benchmarks leads to a large accountability gap. Climate governance is declared a policy objective and not a legal duty, and thus the justiciability of Treaty provisions at regional or national courts is limited⁵⁰. The weak normative orientation here gives Partner States the possibility of a wide range of choices in implementation, which often leads to discrepancies in climate action across the region. Thus, climate change, legally speaking, is still on the margins of the EAC's main economic integration possessions, thereby teasing the Treaty's role of being a legally binding instrument for regional climate governance that is coordinated and enforceable.

The cooperative but non-coercive design of Articles 111 and 112 of the EAC Treaty poses another significant challenge. The provisions, while acknowledging environmental degradation and directing the parties to cooperate concerning transboundary pollution, disaster preparedness and ecosystem conservation, demand a lot of harmonisation and consensus-based actions. There are no mechanisms for enforcement, imposing fines or having the oversight bodies that would have the power to enforce compliance. This type of cooperation is not appropriate for climate change since it demands responses that are timely, binding and collective. In fact, it is often the case that national interests will prevail over regional commitments, especially in situations where climate measures have to compete with short-term economic priorities. The absence of supranational control also hinders the management of cross-boundary climate risks such as rivers, forests and animal migration routes that are shared by the nations. The outcome is that

⁵⁰ Oscar Omondi Donde and others, 'Wetlands for Remediation in Africa' in *Wetlands for Remediation in the Tropics* (2023) 175–195

Articles 111 and 112 are seen more as political commitments than as legal instruments that can be enforced and are thus able to lead to effective regional climate action.

Although the EAC Protocol on Environment and Natural Resources Management has progressive content, it still suffers from serious implementation challenges. Articles 2, 3, 4, and 6 not only set up the principles of sustainable development, but also public participation, environmental impact assessment, and harmonisation with international norms. The Protocol does not provide for binding timelines, quantified climate targets, and compliance mechanisms. This institutional weakness acts as a bottleneck for the Protocol's effectiveness as a regional climate instrument⁵¹. It is the Partner States who will have to carry out the implementation largely, thus creating fragmentation of domestic incorporation and inconsistent enforcement. Inadequate institutional capacity, lack of technical expertise and resources, and poor public awareness campaigns are some of the factors that hinder the effective application of the Protocol's climate-related provisions⁵². To make matters worse, a lack of strong supranational authority to monitor compliance or resolve disputes leaves the Protocol as a mere guiding framework rather than a legally transformative regime. Consequently, these gaps limit its ability to turn paper promises into actual climate outcomes.

The provisions of the Protocol regarding climate change, which are contained in Articles 19, 24, 25, and 30, as well as the EAC Vision 2050 and Climate Change Policy instruments, suffer from the problem of being predominantly aspirational. They advocate for renewable energy, integrated climate measures, pollution control and international climate commitments, but do not set any limits on emissions, require any measurements to be taken, or set targets for adaptation to be enforced. Moreover, the extreme dependence on donor money and climate finance mechanisms means that the financial aspect of the regional climate agenda is quite uncertain. Domestic resource mobilisation is limited, and the EAC Climate Change Fund is not efficiently operationalised, which greatly increases the barriers to implementation. The growth-centred nature of Vision 2050 also puts climate objectives at risk as they may be regarded as secondary to the expansion of industry and infrastructure⁵³. The EAC's sectoral and policy frameworks have great difficulty in bringing about effective and sustained climate action across the EAC without binding commitments, predictable financing, and strong monitoring mechanisms in place⁵⁴.

⁵¹ Kingsley Eghonghon Ukhurebor and others, 'Environmental Influence of Gas Flaring' (2024) *Geofluids* 1321022

⁵² Yohannes Gelaye and Sewnet Getahun, 'Carbon Sequestration Potential of Fruit Trees in Ethiopia' (2024) 10(1) *Cogent Food & Agriculture* 2294544

⁵³ *Ibid*

⁵⁴ *Ibid*

In conclusion, the EAC's legal response to climate change is characterised by strong normative aspirations but weak enforcement. The lack of binding obligations, robust institutions and accountability mechanisms restricts the transformative impact and highlights the need for stronger supranational enforcement to accomplish the sustainable development goals.

4. Conclusion

The research argues that climate change is the biggest obstacle for the East African Community to achieve sustainable development, since its impact on the three major sustainability factors: environment, economy, and society, is extremely detrimental. The research also claims that the EAC's legal and policy measures provide the best possible scenario for taking joint initiatives on climate and are also in line with the basics of sustainability and regional cooperation. The linkage to the respective Sustainable Development Goals denotes the region's increased readiness to deal with the climate risks at a higher level. Nonetheless, the adverse effects of global warming put a spotlight on the need for not only the strengthening of these models but also of the definition of a clear operational focus and the improvement of institutional coherence for regional climate governance to be effective.

The study proposes that the EAC's climate law should first and foremost focus on reinforcing the regional climate laws by means of complete harmonization and the unmistakable incorporation of the Sustainable Development Goals into the region's legal instruments. To make the implementation more effective, guidance, a monitoring system with indicators and measurable targets will be developed. In the meantime, the EAC needs to strengthen inter-institutional collaboration by clearly delineating tasks and motivating cooperation among the different regional organizations. The negative impacts of climate change should be considered in all regional sectors that are linked with economic development, like trade, infrastructure and agriculture. Moreover, it is also suggested that continuous training, sharing of regional data, and the creation of special climate financing mechanisms as ways to overcome the challenges of implementation and pave the way for a resilient and sustainable development.