



ISSN: 2583-7753

# LAWFOYER INTERNATIONAL JOURNAL OF DOCTRINAL LEGAL RESEARCH

[ISSN: 2583-7753]

Volume 4 | Issue 2

2026

DOI: <https://doi.org/10.70183/lijdlr.2026.v04.180>

© 2026 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](#)

---

# FROM GLOBAL CLIMATE AGREEMENTS TO LOCAL RESILIENCE: LEGAL INNOVATIONS, LOCAL CAPACITY AND GOVERNANCE PATHWAYS FOR CLIMATE JUSTICE

---

Omoyemen Lucia Odigie-Emmanuel<sup>1</sup>

## I. ABSTRACT

*Climate change presents one of the most significant governance and legal challenges of the twenty-first century, particularly for vulnerable states whose adaptive capacity remains constrained by institutional, financial and regulatory limitations. While international climate agreements have established important frameworks for mitigation and adaptation, the translation of these commitments into effective governance systems remains uneven across jurisdictions. This article examines how legal tools, institutional capacity and governance innovation can strengthen climate justice and resilience through a multi-level system of climate governance. Drawing on doctrinal legal analysis and jurisprudential scholarship, the study examines the evolving architecture of climate law across international, national and local governance systems. It analyses key developments within the global climate regime, including the United Nations Framework Convention on Climate Change and the Paris Agreement, alongside emerging climate litigation and advisory jurisprudence from international and domestic courts. Particular attention is given to the role of national climate legislation, including Nigeria's Climate Change Act, and the growing significance of subnational and community-based governance initiatives in implementing climate adaptation and resilience strategies. The article argues that climate justice cannot be realised through international agreements alone but requires an integrated legal architecture in which international norms, domestic legislation and local governance systems operate in mutually reinforcing ways. It demonstrates that effective climate governance depends on robust legal frameworks, transparent regulatory institutions and participatory governance mechanisms capable of addressing both mitigation and adaptation challenges. By integrating*

---

<sup>1</sup> Nigerian Law School, Centre for Human Rights & Climate Change Research, Email: [lawschoollucia@yahoo.co.uk](mailto:lawschoollucia@yahoo.co.uk)

*environmental justice theory, sustainable development theory and polycentric governance approaches, the article advances a jurisprudential framework for understanding how law can support equitable climate transitions. It concludes that strengthening legal accountability, improving climate finance governance and enhancing institutional capacity are essential for advancing climate resilience and ensuring that vulnerable states can participate effectively in the global transition toward sustainable and low-carbon development.*

## II. KEYWORDS

Climate Justice, Legal Innovation, Local Governance, Climate Resilience, Institutional Capacity Building.

## III. INTRODUCTION

Climate change has emerged as one of the most profound governance and legal challenges confronting the international community in the twenty-first century. Rising global temperatures, increasingly severe weather events, sea-level rise and ecological degradation are transforming environmental systems and threatening socio-economic stability across many regions of the world. Scientific assessments compiled by the Intergovernmental Panel on Climate Change demonstrate that anthropogenic greenhouse gas emissions have significantly altered the Earth's climate system, producing consequences that extend beyond environmental degradation to encompass food security, water resources, public health and economic development.<sup>2</sup>

The impacts of climate change are not distributed evenly across the world. Many developing countries face heightened vulnerability due to geographical exposure to climate hazards, dependence on climate-sensitive economic sectors and limited adaptive capacity. Regions such as Africa are particularly vulnerable to climate impacts affecting agricultural productivity, water availability and public health systems.<sup>3</sup> These developments raise fundamental questions about the capacity of existing legal

---

<sup>2</sup> Intergovernmental Panel on Climate Change, *Sixth Assessment Report: Climate Change 2023* (IPCC 2023).

<sup>3</sup> Intergovernmental Panel on Climate Change, *Climate Change 2022: Impacts, Adaptation and Vulnerability* (IPCC 2022).

institutions and governance frameworks to address complex environmental risks that transcend national boundaries.

Studies conducted by the United Nations Economic Commission for Africa indicate that climate change may undermine development gains across the continent by intensifying poverty, displacement and environmental degradation.<sup>4</sup> Yet these countries have historically contributed relatively little to global greenhouse gas emissions compared with industrialised economies. This imbalance between responsibility and vulnerability has generated increasing calls for the recognition of climate justice within international environmental governance. Climate justice emphasises the normative principle that responses to climate change must account for historical responsibility, differentiated capabilities and the protection of vulnerable populations.<sup>5</sup>

The concept reflects broader concerns regarding distributive fairness and the equitable allocation of environmental burdens and benefits across societies and generations. The principle of common but differentiated responsibilities and respective capabilities, which forms a cornerstone of international climate law, reflects this normative framework. The principle recognises that while all states share responsibility for addressing climate change, developed countries bear a greater obligation to reduce emissions and support climate mitigation and adaptation initiatives in developing regions.<sup>6</sup> This principle has shaped the design of international climate agreements and continues to influence negotiations concerning climate finance, technology transfer and adaptation assistance.

Over the past three decades, the international community has developed an increasingly sophisticated system of climate governance institutions and legal instruments. The United Nations Framework Convention on Climate Change (UNFCCC) established the foundational legal framework for international cooperation on climate policy. Subsequent agreements such as the Kyoto Protocol and the Paris Agreement expanded

---

<sup>4</sup> United Nations Economic Commission for Africa, *African Climate Policy Centre Report* (UNECA 2022).

<sup>5</sup> Simon Caney, 'Climate Justice' (2010) 13 *Philosophy and Public Affairs*.

<sup>6</sup> United Nations Framework Convention on Climate Change (1992) art 3.

this framework by introducing emissions reduction commitments, climate finance mechanisms and institutional arrangements designed to facilitate global cooperation on climate mitigation and adaptation.<sup>7</sup>

The Paris Agreement represents a significant evolution in international climate governance. Unlike earlier regulatory models based on legally binding emissions targets for a limited group of states, the Agreement adopts a hybrid governance approach centred on nationally determined contributions.<sup>8</sup> States are required to submit national climate plans outlining mitigation and adaptation strategies while participating in global monitoring and transparency mechanisms designed to evaluate progress toward collective climate goals.

Despite these developments, significant challenges remain in translating international climate commitments into effective domestic policy frameworks. Many countries lack comprehensive climate legislation, institutional coordination mechanisms and regulatory systems capable of ensuring transparency and accountability in climate governance.<sup>9</sup> Furthermore, vulnerable communities often face limited access to legal remedies capable of addressing climate-related harms and environmental injustice.

Legal systems play an increasingly important role in addressing these governance gaps. Climate law has developed rapidly in recent years through the adoption of domestic climate legislation, the expansion of environmental regulatory frameworks and the emergence of climate litigation before national and international courts.<sup>10</sup> Judicial decisions addressing climate governance have begun to clarify the obligations of governments and corporations in relation to climate mitigation and adaptation.

Notable cases illustrate the growing role of courts in shaping climate governance. In *Urgenda Foundation v Netherlands*<sup>11</sup>, the Dutch Supreme Court held that the

---

<sup>7</sup> Kyoto Protocol (1997); Paris Agreement (2015).

<sup>8</sup> Lavanya Rajamani and Jacqueline Peel, *The Making of the Paris Agreement* (OUP 2017).

<sup>9</sup> Daniel Bodansky, *The Art and Craft of International Environmental Law* (Harvard University Press 2010).

<sup>10</sup> Jacqueline Peel and Hari Osofsky, *Climate Change Litigation* (CUP 2015).

<sup>11</sup> *Urgenda Foundation v State of the Netherlands* (2019) Supreme Court of the Netherlands.

government's failure to adopt adequate emissions reduction measures violated its duty to protect citizens from climate-related risks. Similarly, in *Leghari v Federation of Pakistan*<sup>12</sup>, the Lahore High Court emphasised that the government's failure to implement climate policy undermined constitutional rights to life and dignity. These cases demonstrate how judicial institutions increasingly interpret environmental obligations within broader frameworks of human rights and constitutional law.

Against this background, strengthening legal tools and institutional capacity has become a central priority for global climate governance. Effective climate governance requires legal frameworks capable of guiding mitigation strategies, promoting climate resilience and ensuring accountability for environmental stewardship. Achieving these objectives requires coordinated action across multiple levels of governance, including international institutions, national governments and local communities.

This article examines the role of law in strengthening climate justice and resilience through a multi-level system of climate governance. It argues that effective climate governance depends on the development of integrated legal frameworks in which international norms, domestic legislation and local governance systems operate in mutually reinforcing ways. By analysing the evolution of climate law across international, national and local governance systems, the study seeks to identify pathways through which legal tools and institutional reforms can support equitable climate transitions and strengthen environmental resilience in vulnerable regions.

### **A. Research Objectives**

This study aims to examine how legal frameworks, institutional capacity and governance innovations can strengthen climate justice and climate resilience within a multi-level system of climate governance. Specifically, the article seeks to:

---

<sup>12</sup> *Leghari v Federation of Pakistan* (2015) Lahore High Court.

1. Analyse the evolution of international climate law and governance under instruments such as the United Nations Framework Convention on Climate Change and the Paris Agreement.
2. Evaluate the role of domestic climate legislation, with particular reference to Nigeria's Climate Change Act 2021.
3. Assess the contribution of subnational and community-based governance mechanisms to climate adaptation and resilience.
4. Identify legal and institutional reforms necessary to promote equitable and effective climate governance in vulnerable jurisdictions.

## **B. Research Questions**

The article is guided by the following research questions:

1. How do international climate agreements shape legal obligations relating to climate justice and resilience?
2. To what extent do domestic climate laws and institutions translate international commitments into enforceable governance mechanisms?
3. What role do local and community-based governance systems play in advancing climate adaptation and resilience?
4. Which legal and institutional reforms are necessary to strengthen climate justice and effective climate governance in vulnerable states?

## **C. Research Methodology**

This article adopts a doctrinal legal research methodology. The study is based primarily on the analytical examination of legal texts, including international treaties, national legislation, judicial decisions and policy instruments relating to climate governance.

Primary sources include the United Nations Framework Convention on Climate Change, the Paris Agreement, the Kyoto Protocol and Nigeria's Climate Change Act 2021, together with relevant case law such as *Urgenda Foundation v State of the Netherlands*, *Leghari v Federation of Pakistan* and selected Nigerian environmental decisions.

Secondary sources include academic literature, institutional reports and jurisprudential scholarship on climate justice, environmental governance and resilience theory. The study also incorporates a limited comparative approach by examining legislative and judicial developments from jurisdictions including the United Kingdom, Kenya, South Africa and Nigeria in order to identify best practices and governance pathways for strengthening climate resilience and climate justice.

#### **IV. CONCEPTUAL AND THEORETICAL FRAMEWORK**

Understanding the legal dimensions of climate justice and resilience requires engagement with the conceptual foundations and theoretical frameworks that shape contemporary environmental governance. Climate change presents challenges that extend beyond traditional legal categories because it involves complex interactions between scientific knowledge, economic policy, human rights and international cooperation. As a result, legal responses to climate change often draw upon multiple theoretical perspectives that help explain the normative foundations of environmental protection and the institutional arrangements required to address global environmental challenges.

##### **A. Environmental Justice Theory**

Environmental justice theory provides one of the most influential normative frameworks for analysing climate governance. The theory emerged from scholarship and social movements highlighting the unequal distribution of environmental harms across societies. Early environmental justice research demonstrated that marginalised communities often experience disproportionate exposure to environmental hazards while lacking meaningful participation in environmental decision-making processes.<sup>13</sup>

Within the context of climate change, environmental justice emphasises that mitigation and adaptation policies must address inequalities associated with climate impacts. Vulnerable communities frequently experience the most severe consequences of climate change despite contributing the least to global emissions. The environmental justice

---

<sup>13</sup> Robert Bullard, *Dumping in Dixie: Race, Class and Environmental Quality* (Westview Press 2000).

framework therefore emphasises the importance of equitable governance structures that protect vulnerable populations and ensure meaningful participation in environmental policymaking.

### **B. Sustainable Development Theory**

Sustainable development theory represents another important conceptual foundation for climate governance. The concept gained prominence through international environmental policy debates culminating in the publication of the Brundtland Report, which defined sustainable development as development that meets present needs without compromising the ability of future generations to meet their own needs.<sup>14</sup>

Sustainable development theory emphasises the integration of environmental protection, economic development and social equity. Climate governance policies increasingly rely on sustainable development principles when designing strategies that balance emissions reduction objectives with development priorities. The principle of intergenerational equity, which requires current generations to manage environmental resources responsibly for the benefit of future generations, has become a central component of environmental law and climate governance discourse.<sup>15</sup>

### **C. Global Environmental Governance Theory**

Global environmental governance theory examines the institutional structures and regulatory mechanisms through which states and international organisations coordinate responses to transboundary environmental challenges. Climate change represents a global collective action problem that cannot be addressed solely through domestic policy measures. Instead, effective governance requires cooperative international frameworks capable of facilitating collective action among states.

Scholars have emphasised that global environmental governance involves a complex network of treaties, international organisations, regulatory institutions and civil society

---

<sup>14</sup> World Commission on Environment and Development, *Our Common Future* (Oxford University Press 1987).

<sup>15</sup> Edith Brown Weiss, *In Fairness to Future Generations* (UN University Press 1989).

actors.<sup>16</sup> These governance systems aim to coordinate policy responses, facilitate information sharing and establish legal norms guiding environmental behaviour at both domestic and international levels.

#### **D. Resilience Governance Theory**

Resilience governance theory focuses on the capacity of institutions and social systems to adapt to environmental change and uncertainty. Climate change introduces dynamic and unpredictable environmental risks that challenge traditional governance structures. Legal systems must therefore incorporate adaptive governance mechanisms capable of responding to evolving scientific knowledge and environmental conditions.<sup>17</sup> Resilience-based governance frameworks emphasise flexibility, institutional learning and participatory decision-making processes that enable societies to respond effectively to environmental shocks.

#### **E. Polycentric Governance Theory**

Polycentric governance theory offers an additional analytical perspective for understanding climate governance. The theory, associated particularly with the work of Elinor Ostrom, emphasises the existence of multiple centres of decision-making operating simultaneously across different governance levels.<sup>18</sup> Rather than relying on a single hierarchical authority, polycentric governance systems involve overlapping networks of international institutions, national governments, regional organisations and local communities. These decentralised governance structures can facilitate policy experimentation and improve institutional responsiveness to complex environmental challenges.

---

<sup>16</sup> Daniel Bodansky, Jutta Brunnée and Ellen Hey, *The Oxford Handbook of International Environmental Law* (OUP 2007).

<sup>17</sup> Carl Folke and others, 'Resilience Thinking: Integrating Resilience, Adaptability and Transformability' (2010) 15 *Ecology and Society* 20.

<sup>18</sup> Elinor Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change' (2010) 20 *Global Environmental Change* 550.

Together, these theoretical perspectives provide important analytical tools for understanding the development of climate law and governance innovations. Environmental justice and sustainable development theories highlight normative principles guiding climate governance, while global environmental governance and polycentric governance theories explain the institutional structures required for effective climate policy implementation.

## V. CLIMATE JUSTICE, CLIMATE RESILIENCE AND SUSTAINABLE DEVELOPMENT

Climate justice and climate resilience are closely linked to the broader framework of sustainable development. Climate change is not only an environmental issue but also a development challenge affecting food security, water availability, public health, energy systems and economic stability. Scientific evidence demonstrates that rising global temperatures are already producing significant ecological and socio-economic impacts across multiple regions of the world.<sup>19</sup> These impacts disproportionately affect developing countries and vulnerable communities whose economic systems and livelihoods are highly dependent on climate-sensitive sectors such as agriculture, fisheries and natural resource management.<sup>20</sup>

The Intergovernmental Panel on Climate Change has repeatedly emphasised that climate change is intensifying existing socio-economic inequalities. According to the Panel's Sixth Assessment Report, climate-related hazards such as droughts, floods and extreme heat events are increasing in frequency and intensity, posing significant risks to human settlements, ecosystems and infrastructure.<sup>21</sup> These risks are particularly severe in Africa,

---

<sup>19</sup> Intergovernmental Panel on Climate Change, *Climate Change 2022: Mitigation of Climate Change* (IPCC 2022).

<sup>20</sup> Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press 2007).

<sup>21</sup> IPCC, *Sixth Assessment Report: Impacts, Adaptation and Vulnerability* (IPCC 2022).

where many countries face limited adaptive capacity due to financial constraints, governance challenges and rapid population growth.<sup>22</sup>

Within this context, the concept of climate justice has emerged as a normative framework guiding international climate governance. Climate justice emphasises that climate change mitigation and adaptation strategies must account for historical responsibility, economic capacity and the unequal distribution of climate impacts.<sup>23</sup> The principle of common but differentiated responsibilities and respective capabilities, enshrined in the UNFCCC and reaffirmed in subsequent climate agreements, reflects the recognition that developed countries bear greater responsibility for historical emissions and should therefore take the lead in addressing climate change.<sup>24</sup>

Climate justice also encompasses the protection of vulnerable communities whose livelihoods are threatened by climate impacts. Small island developing states, coastal populations and indigenous communities often face existential risks associated with sea-level rise, environmental degradation and resource scarcity.<sup>25</sup> The recognition of these vulnerabilities has influenced international negotiations concerning climate finance, adaptation support and the emerging governance framework addressing loss and damage associated with climate change.<sup>26</sup>

Closely related to the concept of climate justice is the notion of climate resilience. Resilience refers to the capacity of societies, institutions and ecosystems to anticipate, absorb and recover from climate-related shocks while maintaining essential functions.<sup>27</sup> Climate resilience strategies emphasise adaptive governance systems capable of responding to environmental uncertainty and evolving climate risks. These strategies

---

<sup>22</sup> United Nations Economic Commission for Africa, *Climate Change and Development in Africa* (UNECA 2021).

<sup>23</sup> Lavanya Rajamani, 'The Principle of Common but Differentiated Responsibility' (2000) 9 *Review of European Community and International Environmental Law*.

<sup>24</sup> UNFCCC (n 5) art 3.

<sup>25</sup> Christina Voigt, *International Judicial Practice on the Environment* (Cambridge University Press 2019).

<sup>26</sup> Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (OUP 2017).

<sup>27</sup> Neil Adger, 'Social Capital, Collective Action and Adaptation to Climate Change' (2003) 79 *Economic Geography*.

include infrastructure planning, ecosystem protection, disaster risk reduction and sustainable land management policies designed to reduce vulnerability to climate impacts.

The relationship between climate governance and sustainable development is further reinforced by the Sustainable Development Goals (SDGs) adopted by the international community. Sustainable Development Goal 13 calls for urgent action to combat climate change and its impacts while recognising the interconnected nature of environmental sustainability, economic development and social equity.<sup>28</sup> Climate action is closely linked to other development priorities, including poverty reduction, food security, sustainable cities and strong institutions.

Regional organisations have also emphasised the importance of integrating climate governance into development planning. The United Nations Economic Commission for Africa has highlighted the need for African countries to adopt climate-resilient development strategies capable of safeguarding economic growth while addressing environmental vulnerability.<sup>33</sup> Such strategies involve strengthening climate risk assessment, promoting sustainable agricultural practices and investing in climate-resilient infrastructure.

The integration of climate justice, resilience and sustainable development therefore represents a central challenge for contemporary climate governance. Legal and policy frameworks must balance the objectives of emissions reduction, economic development and social equity while ensuring that vulnerable communities are not disproportionately affected by climate policies. Addressing this challenge requires coordinated action across international, national and local governance systems.

## **VI. SCALING CLIMATE LAW AND GOVERNANCE SOLUTIONS FOR NET-ZERO TRANSITIONS AND ADAPTATION**

---

<sup>28</sup> United Nations, *Transforming our World: The 2030 Agenda for Sustainable Development* (UN 2015).

The scale and urgency of the climate crisis require legal and governance responses capable of accelerating climate action across multiple sectors of the global economy. Scientific assessments indicate that limiting global warming to relatively safe levels will require rapid and far-reaching transitions in energy systems, land use, industrial production and infrastructure development.<sup>29</sup> These transitions must occur within a relatively short timeframe in order to prevent irreversible environmental damage and escalating socio-economic disruptions.

One of the most significant developments in contemporary climate governance is the emergence of net-zero emissions targets as a guiding principle for climate mitigation policy. Net-zero strategies aim to balance anthropogenic greenhouse gas emissions with carbon removal mechanisms such as reforestation and carbon capture technologies.<sup>30</sup> Many governments have incorporated net-zero targets into national climate legislation and long-term policy frameworks, reflecting the growing recognition that deep decarbonisation of economic systems is necessary to stabilise the global climate.

International climate agreements have played a critical role in promoting the adoption of net-zero strategies. The Paris Agreement established the objective of limiting global temperature increases to well below 2°C above pre-industrial levels while pursuing efforts to limit warming to 1.5°C.<sup>31</sup> Achieving these objectives requires substantial reductions in greenhouse gas emissions across all sectors of the global economy.

The governance architecture of the Paris Agreement reflects a hybrid model combining international legal obligations with domestic policy flexibility. Rather than imposing uniform emissions targets, the Agreement relies on nationally determined contributions submitted by individual states. These commitments outline national mitigation and adaptation strategies while allowing countries to tailor climate policies to their specific economic and developmental circumstances.<sup>32</sup>

---

<sup>29</sup> IPCC, *Global Warming of 1.5°C* (IPCC Special Report 2018).

<sup>30</sup> Nicholas Stern and Joseph Stiglitz, 'Carbon Pricing Leadership Report' (World Bank 2017).

<sup>31</sup> Paris Agreement (n 6) art 2.

<sup>32</sup> Rajamani and Peel (n 8).

In addition to mitigation policies, the international climate regime also emphasises the importance of strengthening adaptive capacity in vulnerable countries. Climate adaptation involves policies and measures designed to reduce vulnerability to climate impacts and enhance the resilience of social and ecological systems.<sup>33</sup> Adaptation strategies may include improved water management systems, climate-resilient agricultural practices and investments in infrastructure capable of withstanding extreme weather events.

However, implementing large-scale adaptation programmes requires significant financial resources and institutional capacity. Climate finance has therefore become a central component of international climate governance. International negotiations have emphasised the responsibility of developed countries to mobilise financial resources in support of climate mitigation and adaptation initiatives in developing countries.<sup>34</sup>

International financial mechanisms such as the Green Climate Fund and other climate finance initiatives seek to mobilise resources for renewable energy development, climate-resilient infrastructure and adaptation planning in vulnerable regions.<sup>35</sup> These mechanisms are intended to bridge the gap between the substantial financial resources required for climate action and the limited fiscal capacity of many developing countries.

Technology transfer also plays an important role in enabling climate transitions. Access to advanced technologies related to renewable energy, energy efficiency and climate-resilient infrastructure can significantly reduce emissions and enhance adaptive capacity. International cooperation initiatives seek to facilitate technology sharing while addressing intellectual property and capacity-building challenges associated with technological innovation.<sup>36</sup>

Ultimately, scaling climate governance solutions requires coordinated legal innovation across international institutions, national governments and local governance systems.

---

<sup>33</sup> IPCC, *Adaptation and Vulnerability Assessment* (IPCC 2022).

<sup>34</sup> UNFCCC Conference of the Parties, *Decision on Climate Finance* (COP decisions).

<sup>35</sup> Green Climate Fund, *GCF Operational Framework* (GCF 2021).

<sup>36</sup> United Nations Environment Programme, *Emissions Gap Report* (UNEP 2023).

Legal frameworks must create regulatory certainty for long-term investment in low-carbon technologies while ensuring accountability for climate commitments. Strengthening institutional capacity, improving climate finance governance and enhancing policy coordination will therefore be essential for supporting global transitions toward sustainable and climate-resilient development.

## VII. DOMESTIC AND LOCAL CLIMATE GOVERNANCE

### A. National Legal Innovations and Climate Legislation

Although international climate agreements provide the normative framework for global climate governance, the practical implementation of climate policy largely depends on the effectiveness of domestic legal systems. International commitments must be translated into enforceable national legislation, regulatory frameworks and institutional mechanisms capable of guiding mitigation and adaptation strategies.<sup>37</sup> Without strong domestic governance structures, international climate agreements risk remaining largely aspirational rather than producing measurable environmental outcomes.

National climate legislation has therefore emerged as a critical component of contemporary climate governance. These legislative frameworks typically establish emissions reduction targets, define institutional responsibilities for climate policy implementation and create accountability mechanisms for monitoring progress toward climate goals.<sup>38</sup> In many jurisdictions, climate laws also integrate climate considerations into broader economic planning processes, thereby ensuring that mitigation and adaptation strategies align with national development priorities.

Several countries have adopted comprehensive climate legislation in recent years. The United Kingdom Climate Change Act 2008 is often cited as one of the most influential examples of domestic climate legislation. The Act introduced legally binding carbon budgets designed to guide emissions reductions across successive five-year periods while

---

<sup>37</sup> Daniel Farber and Marjan Peeters, *Climate Change Law* (Edward Elgar 2016).

<sup>38</sup> Richard Lazarus, *The Making of Environmental Law* (University of Chicago Press 2004).

establishing the Committee on Climate Change as an independent advisory body responsible for monitoring government progress.<sup>39</sup> Similar legislative frameworks have been adopted in other jurisdictions seeking to institutionalise climate governance within national policy systems.

African countries have also begun to develop legislative responses to climate change. Kenya's Climate Change Act 2016, for example, created institutional structures for integrating climate considerations into development planning and promoting climate-resilient economic growth.<sup>40</sup> South Africa has likewise introduced legislative reforms aimed at reducing greenhouse gas emissions and strengthening environmental governance.

### **B. Nigeria's Climate Change Act**

Nigeria has taken an important step toward strengthening domestic climate governance through the enactment of the Climate Change Act 2021, which provides the country's first comprehensive legislative framework addressing climate change.<sup>41</sup> The Act establishes the National Council on Climate Change, which serves as the central coordinating body responsible for climate policy formulation, implementation and monitoring.

The Council is mandated to coordinate climate action across federal ministries, government agencies and subnational authorities while ensuring that Nigeria's climate policies align with international commitments under the Paris Agreement.<sup>42</sup> The Act also promotes the integration of climate considerations into national development planning and encourages sustainable investment in renewable energy and climate-resilient infrastructure.

---

<sup>39</sup> United Kingdom Climate Change Act 2008.

<sup>40</sup> Kenya Climate Change Act 2016.

<sup>41</sup> Climate Change Act 2021 (Nigeria).

<sup>42</sup> *ibid* s 3.

By embedding climate commitments within domestic legislation, the Act represents an important step toward institutionalising climate governance within Nigeria's legal system. However, effective implementation will depend on the availability of financial resources, technical expertise and coordination among government institutions.

### C. Nigerian Environmental Jurisprudence

Although climate litigation remains relatively limited in Nigeria, environmental jurisprudence developed through pollution and resource extraction cases provides a foundation for future climate accountability. Nigeria's courts have increasingly recognised the importance of environmental protection within constitutional and statutory frameworks.

In *Gbemre v Shell Petroleum Development Company*, the Federal High Court held that the practice of gas flaring in the Niger Delta violated the constitutional rights of citizens to life and dignity.<sup>43</sup> The decision highlighted the serious environmental and public health consequences of gas flaring while emphasising the obligation of both government and private corporations to comply with environmental regulations.

Another significant case emerged in *Centre for Oil Pollution Watch v Nigerian National Petroleum Corporation*, where the Supreme Court expanded the doctrine of locus standi in environmental litigation.<sup>44</sup> The Court recognised the right of civil society organisations to bring environmental claims in the public interest, thereby strengthening the capacity of non-governmental organisations to pursue environmental accountability through the courts. These developments suggest that Nigerian courts may play an increasingly important role in shaping environmental governance and potentially addressing climate-related disputes in the future.

Recent developments in international adjudication further reinforce the growing role of judicial institutions in climate governance. In its Advisory Opinion on Climate Change

---

<sup>43</sup> *Gbemre v Shell Petroleum Development Company* (2005) Federal High Court Nigeria.

<sup>44</sup> *Centre for Oil Pollution Watch v Nigerian National Petroleum Corporation* (2018) Supreme Court of Nigeria.

and International Law delivered on 21 May 2024, the International Tribunal for the Law of the Sea held that States Parties to the United Nations Convention on the Law of the Sea have binding obligations to prevent, reduce and control marine pollution arising from anthropogenic greenhouse gas emissions. The Tribunal confirmed that climate change engages existing treaty obligations and requires states to exercise due diligence in protecting the marine environment.

This jurisprudential development was significantly expanded by the International Court of Justice in its Advisory Opinion on *Obligations of States in respect of Climate Change* delivered on 23 July 2025. The Court affirmed that states are subject to binding obligations under treaty law, customary international law and general principles of international law to protect the climate system and prevent significant transboundary harm. It further clarified that national discretion in preparing nationally determined contributions is constrained by a due diligence standard and that a failure to take adequate climate action may constitute an internationally wrongful act giving rise to state responsibility. These advisory opinions substantially strengthen the legal foundations of climate justice and provide authoritative support for the enforceability of international climate obligations.<sup>45</sup>

#### **D. Local Legal Innovations and Polycentric Climate Governance**

While national legislation establishes the regulatory framework for climate policy, many climate mitigation and adaptation initiatives are implemented at the subnational level. Cities, regional governments and local communities often manage infrastructure systems, land-use planning and environmental management policies that directly influence climate resilience.

Local governments play a particularly important role in climate governance because they are responsible for sectors such as urban planning, waste management, water resources

---

<sup>45</sup> *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law* (Advisory Opinion) ITLOS Case No 31, 21 May 2024.

and transportation systems.<sup>46</sup> Policies adopted at the municipal level can therefore significantly influence greenhouse gas emissions and environmental sustainability.

Cities around the world have begun to adopt climate action plans designed to reduce emissions and strengthen resilience. Urban climate initiatives often focus on promoting renewable energy adoption, improving energy efficiency in buildings and developing sustainable transportation systems.<sup>47</sup> International networks such as the C40 Cities Climate Leadership Group have emerged to facilitate cooperation among cities addressing climate challenges.

### **E. Local Climate Governance in Nigeria**

In Nigeria, climate change presents serious challenges for local communities across multiple regions of the country. Coastal areas face increasing risks associated with sea-level rise and coastal erosion, while northern regions experience desertification and water scarcity. Flooding has also become a recurring hazard affecting communities in many states.

Local governments therefore play an important role in implementing climate adaptation strategies and disaster risk management policies. State-level environmental agencies often oversee policies related to land-use planning, waste management and environmental conservation.<sup>48</sup> Strengthening local governance capacity will therefore be critical for improving climate resilience in Nigeria.

### **F. Indigenous Knowledge and Community Adaptation**

Community knowledge systems also contribute significantly to climate resilience. Indigenous environmental management practices often incorporate long-standing ecological knowledge that can inform sustainable resource management strategies.<sup>49</sup>

---

<sup>46</sup> Harriet Bulkeley and Michele Betsill, *Cities and Climate Change* (Routledge 2013).

<sup>47</sup> C40 Cities Climate Leadership Group, *Global Cities Climate Action Report* (2021).

<sup>48</sup> Environmental Impact Assessment Act Cap E12 LFN 2004.

<sup>49</sup> UNEP, *Indigenous Knowledge and Climate Adaptation* (UNEP 2019).

Many communities possess traditional knowledge regarding agricultural practices, water conservation and ecosystem management that may enhance adaptation to climate variability.

International climate governance frameworks increasingly recognise the importance of incorporating indigenous knowledge into climate policy development. The integration of local knowledge systems can improve the effectiveness of adaptation strategies while promoting inclusive environmental governance.

### **G. Polycentric Governance and Climate Policy**

The increasing involvement of local governments and community actors reflects the emergence of a polycentric climate governance system. Polycentric governance involves multiple centres of decision-making operating simultaneously across different governance levels.<sup>50</sup>

This governance model contrasts with traditional hierarchical regulatory systems by allowing decentralised institutions to experiment with policy innovations tailored to local conditions. Scholars argue that polycentric governance systems may enhance the effectiveness of climate policy by encouraging cooperation among multiple governance actors while promoting institutional learning.

For complex environmental challenges such as climate change, polycentric governance offers significant advantages. International institutions provide normative frameworks guiding global climate action, national governments develop regulatory structures implementing these commitments, and local authorities design policies responding to specific environmental conditions.

These interacting governance levels create a dynamic system in which climate policies can evolve through experimentation, learning and institutional collaboration.

---

<sup>50</sup> Elinor Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change' (2010) *Global Environmental Change*.

Strengthening coordination among these governance actors remains essential for improving climate policy effectiveness.

## VIII. GOVERNANCE REFORM AND FUTURE PATHWAYS

### A. Governance, Policy and Transparency Innovations for Climate Resilience

Effective climate governance requires not only legal commitments but also governance systems capable of ensuring transparency, accountability and institutional coordination. Climate policy implementation involves complex regulatory processes, substantial financial resources and long-term planning across multiple sectors of the economy. Without robust governance structures, climate policies risk remaining symbolic commitments rather than producing measurable environmental outcomes.<sup>51</sup>

Transparency has therefore become a central principle of modern climate governance. Transparent governance frameworks allow governments, civil society organisations and international institutions to monitor climate policy implementation and evaluate progress toward emissions reduction and adaptation goals. Public access to environmental information also enables communities affected by climate change to participate more effectively in environmental decision-making processes.

The Paris Agreement incorporates transparency as a core component of its governance architecture. Article 13 establishes an enhanced transparency framework requiring states to report regularly on greenhouse gas emissions, mitigation actions and adaptation initiatives.<sup>52</sup> These reports are subject to technical review by international experts, enabling the global community to assess collective progress toward achieving the objectives of the Agreement.

Monitoring and reporting mechanisms are essential for ensuring that climate commitments translate into practical policy outcomes. The international climate regime therefore relies on Monitoring, Reporting and Verification (MRV) systems designed to

---

<sup>51</sup> Nicholas Stern, *The Economics of Climate Change* (Cambridge University Press 2007).

<sup>52</sup> Paris Agreement (2015) art 13.

track emissions levels and evaluate the effectiveness of climate policies.<sup>53</sup> These systems require governments to develop reliable national greenhouse gas inventories, establish institutional mechanisms for environmental monitoring and submit periodic reports detailing progress toward climate objectives.

Effective MRV systems depend heavily on institutional capacity and reliable environmental data. Developing countries often face challenges in implementing advanced monitoring systems due to limited technological infrastructure and financial resources. International cooperation initiatives therefore play an important role in supporting capacity-building programmes that strengthen environmental data systems in vulnerable countries.

Another important governance innovation involves the increasing use of digital technologies in environmental monitoring. Satellite monitoring systems, geographic information systems and environmental data platforms enable governments and international institutions to track deforestation, measure emissions and monitor environmental changes with greater accuracy.<sup>54</sup> These technologies support evidence-based policymaking while enhancing transparency in climate governance.

Climate finance governance also represents a critical component of effective climate policy implementation. Significant financial resources are required to support renewable energy development, climate-resilient infrastructure and adaptation initiatives in vulnerable regions. However, the scale and complexity of climate finance flows create governance challenges related to transparency, accountability and equitable distribution of resources.

International financial institutions have therefore developed governance structures designed to monitor the allocation and use of climate funds. The Green Climate Fund, for example, operates under institutional arrangements designed to ensure transparency and

---

<sup>53</sup> Intergovernmental Panel on Climate Change, *Sixth Assessment Report* (IPCC 2023).

<sup>54</sup> UNEP, *Emissions Gap Report* (2023).

accountability in the management of climate finance.<sup>55</sup> These mechanisms require detailed reporting on project implementation, financial expenditures and environmental outcomes.

Effective governance of climate finance is particularly important for developing countries, where climate adaptation initiatives often depend on international financial assistance. Ensuring that financial resources reach vulnerable communities requires robust regulatory frameworks capable of preventing corruption and promoting accountability in climate finance management.

Disaster risk governance also plays a critical role in climate resilience strategies. Climate change is expected to increase the frequency and severity of extreme weather events such as floods, droughts and storms. Legal frameworks addressing disaster preparedness, emergency response and post-disaster recovery must therefore be integrated into broader climate adaptation policies.

International frameworks such as the Sendai Framework for Disaster Risk Reduction emphasise the importance of proactive risk management strategies aimed at reducing vulnerability before disasters occur.<sup>56</sup> Integrating climate risk assessments into infrastructure planning, urban development and environmental management can significantly reduce the social and economic impacts of climate-related disasters. These governance innovations illustrate how legal and institutional reforms can strengthen the capacity of states to manage environmental risks and promote climate resilience.

### **B. Suggestions and Recommendations: Pathways for Strengthening Climate Justice and Resilience**

The preceding sections have examined the evolution of climate law across international, national and local governance systems. While significant progress has been made in developing legal frameworks addressing climate change, substantial governance

---

<sup>55</sup> Green Climate Fund, *GCF Governing Instrument* (2014).

<sup>56</sup> United Nations Office for Disaster Risk Reduction, *Sendai Framework for Disaster Risk Reduction* (2015).

challenges remain. Strengthening climate justice and resilience therefore requires coordinated reforms across multiple institutional and legal domains.

One key pathway involves strengthening international climate cooperation. Climate change is inherently transboundary in nature and cannot be addressed effectively through isolated national policies. International institutions must therefore continue to facilitate cooperation among states on issues such as emissions reduction, technology transfer and climate finance.<sup>57</sup>

Another important reform involves improving the legal clarity and enforceability of climate commitments. Although the Paris Agreement has successfully encouraged widespread participation in global climate governance, its reliance on nationally determined contributions means that the level of ambition varies significantly across states. Strengthening accountability mechanisms within the international climate regime could encourage governments to adopt more ambitious emissions reduction strategies.

Domestic legal frameworks also play a crucial role in strengthening climate governance. Governments should adopt comprehensive climate legislation capable of establishing clear emissions reduction targets, adaptation planning frameworks and institutional coordination mechanisms. Strong domestic legislation can provide regulatory certainty for investors while ensuring that climate policies remain consistent with international commitments.

Institutional capacity building represents another critical element of effective climate governance. Environmental regulatory agencies must possess the technical expertise, financial resources and enforcement authority necessary to implement climate policies. Strengthening institutional capacity may involve specialised training programmes, improved funding for environmental agencies and enhanced coordination among government institutions.

---

<sup>57</sup> Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (OUP 2017).

Judicial accountability mechanisms can also contribute to strengthening climate justice. Courts increasingly play an important role in interpreting environmental laws and ensuring compliance with climate obligations. Climate litigation has emerged as a powerful instrument through which individuals and civil society organisations can challenge inadequate climate policies and promote stronger environmental governance.<sup>58</sup> Recent advisory opinions of the International Tribunal for the Law of the Sea and the International Court of Justice have further clarified that states are subject to legally binding obligations to protect the climate system and prevent significant environmental harm. These decisions provide persuasive authority for domestic courts and strengthen the normative basis for integrating climate accountability into national legal systems.<sup>59</sup>

For vulnerable countries, addressing climate justice also requires strengthening mechanisms addressing loss and damage associated with climate change. Many communities already experience irreversible climate impacts such as coastal erosion, desertification and ecosystem degradation. Legal and financial mechanisms capable of supporting these communities will therefore remain essential components of global climate governance.

Finally, climate governance must be integrated into broader development strategies. Climate change affects multiple sectors of the economy, including agriculture, energy, water resources and infrastructure development. Integrating climate considerations into development planning can help ensure that economic growth remains consistent with environmental sustainability and climate resilience objectives. These reforms collectively illustrate how legal and institutional innovations can strengthen the capacity of societies to address climate change while promoting equitable development.

### C. Conclusion

---

<sup>58</sup> Jacqueline Peel and Hari Osofsky, *Climate Change Litigation* (CUP 2015).

<sup>59</sup> *Obligations of States in respect of Climate Change* (Advisory Opinion) International Court of Justice, 23 July 2025.

Climate change represents one of the most profound governance challenges confronting the international community in the twenty-first century. The accelerating pace of environmental transformation highlights the urgent need for effective legal frameworks capable of guiding mitigation strategies, strengthening climate resilience and ensuring accountability for environmental stewardship.

This article has examined the evolving architecture of climate law through the lens of climate justice and multi-level governance. It has argued that climate governance must operate within a complex legal system in which international institutions, national governments and local communities interact to address environmental challenges. International climate agreements provide the normative foundation for global cooperation, while domestic legal systems translate these commitments into enforceable regulatory frameworks.

Judicial institutions have also emerged as important actors in contemporary climate governance. Climate litigation has expanded rapidly across multiple jurisdictions, demonstrating the growing willingness of courts to interpret environmental obligations within broader frameworks of human rights and constitutional law. These developments highlight the capacity of legal systems to strengthen accountability and encourage more ambitious climate policies.

At the same time, the analysis has emphasised the importance of subnational and community-level governance initiatives. Local governments, cities and community organisations often implement policies that directly influence environmental outcomes. Polycentric governance systems therefore provide valuable opportunities for policy experimentation and institutional learning.

Despite these developments, substantial challenges remain in achieving equitable and effective climate governance. Many countries continue to face institutional capacity constraints, financial limitations and governance fragmentation that hinder the implementation of climate policies. Addressing these challenges requires sustained

investment in institutional development, improved coordination among governance actors and strengthened international cooperation.

Climate justice must remain a central guiding principle of global climate governance. The impacts of climate change are unevenly distributed, with vulnerable countries and communities experiencing the most severe consequences despite contributing least to global emissions. Ensuring that climate governance frameworks address these inequalities is essential for maintaining the legitimacy and effectiveness of international climate cooperation.

Ultimately, the effectiveness of climate governance will depend on the ability of legal systems to integrate environmental protection, economic development and social equity within a coherent institutional framework. Strengthening legal tools, institutional capacity and governance transparency can help build more resilient societies capable of addressing the environmental challenges of the coming decades. In this context, the continued evolution of climate law represents an essential component of the broader global effort to secure a sustainable and equitable future.

## IX. REFERENCES

### A. International Treaties and Agreements

1. United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107.
2. Kyoto Protocol to the United Nations Framework Convention on Climate Change (adopted 11 December 1997, entered into force 16 February 2005) 2303 UNTS 162.
3. Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) UN Doc FCCC/CP/2015/10/Add.1.
4. United Nations, *Transforming our World: The 2030 Agenda for Sustainable Development* UNGA Res 70/1 (25 September 2015).

5. United Nations Office for Disaster Risk Reduction, *Sendai Framework for Disaster Risk Reduction 2015–2030* (2015).
6. United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3.

## **B. National Legislation**

### **1. Nigeria**

- Climate Change Act 2021 (Nigeria).
- Environmental Impact Assessment Act, Cap E12, Laws of the Federation of Nigeria 2004.

### **2. United Kingdom**

- Climate Change Act 2008 (UK).

### **3. Kenya**

- Climate Change Act 2016 (Kenya).

## **C. Cases and Advisory Opinions**

### **1. International Courts and Tribunals**

- *Obligations of States in respect of Climate Change* (Advisory Opinion) International Court of Justice, 23 July 2025.
- *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law* (Advisory Opinion) ITLOS Case No 31, 21 May 2024.

### **2. Foreign Cases**

- *Urgenda Foundation v State of the Netherlands* (Supreme Court of the Netherlands, 20 December 2019) ECLI:NL:HR:2019:2007.
- *Leghari v Federation of Pakistan* (2015) W.P. No 25501/2015 (Lahore High Court).

### 3. Nigerian Cases

- *Gbemre v Shell Petroleum Development Company Nigeria Ltd* (2005) AHRLR 151 (NgHC 2005).
- *Centre for Oil Pollution Watch v Nigerian National Petroleum Corporation* [2019] 5 NWLR (Pt 1666) 518 (SC).

### D. Books

1. Bodansky D, *The Art and Craft of International Environmental Law* (Harvard University Press 2010).
2. Bodansky D, Brunnée J and Hey E (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press 2007).
3. Bodansky D, Brunnée J and Rajamani L, *International Climate Change Law* (Oxford University Press 2017).
4. Brown Weiss E, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (United Nations University Press 1989).
5. Bullard RD, *Dumping in Dixie: Race, Class and Environmental Quality* (3rd edn, Westview Press 2000).
6. Bulkeley H and Betsill M, *Cities and Climate Change: Urban Sustainability and Global Environmental Governance* (Routledge 2013).
7. Farber DA and Peeters M (eds), *Climate Change Law* (Edward Elgar 2016).
8. Lazarus RH, *The Making of Environmental Law* (University of Chicago Press 2004).
9. Peel J and Osofsky HM, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015).
10. Rajamani L and Peel J, *The Making of the Paris Agreement* (Oxford University Press 2017).

11. Stern N, *The Economics of Climate Change: The Stern Review* (Cambridge University Press 2007).
12. Voigt C, *International Judicial Practice on the Environment: Questions of Legitimacy* (Cambridge University Press 2019).
13. World Commission on Environment and Development, *Our Common Future* (Oxford University Press 1987).

#### **E. Journal Articles and Book Chapters**

1. Adger WN, 'Social Capital, Collective Action and Adaptation to Climate Change' (2003) 79 *Economic Geography* 387.
2. Caney S, 'Climate Justice' (2010) 13 *Critical Review of International Social and Political Philosophy* 203.
3. Caney S, 'Climate Justice and the Distribution of Emissions Rights' (2009) 5 *Journal of Global Ethics* 125.
4. Folke C and others, 'Resilience Thinking: Integrating Resilience, Adaptability and Transformability' (2010) 15 *Ecology and Society* 20.
5. Ostrom E, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change' (2010) 20 *Global Environmental Change* 550.
6. Rajamani L, 'The Principle of Common but Differentiated Responsibility' (2000) 9 *Review of European Community and International Environmental Law* 120.
7. Shue H, 'Climate Justice: Vulnerability and Protection' in John Dryzek, Richard Norgaard and David Schlosberg (eds), *The Oxford Handbook of Climate Change and Society* (Oxford University Press 2011).

#### **F. Reports and Institutional Publications**

1. C40 Cities Climate Leadership Group, *Global Cities Climate Action Report* (2021).
2. Green Climate Fund, *GCF Governing Instrument* (2014).

3. Green Climate Fund, *Operational Framework* (2021).
4. Intergovernmental Panel on Climate Change, *Global Warming of 1.5°C* (2018).
5. Intergovernmental Panel on Climate Change, *Climate Change 2022: Impacts, Adaptation and Vulnerability* (2022).
6. Intergovernmental Panel on Climate Change, *Climate Change 2022: Mitigation of Climate Change* (2022).
7. Intergovernmental Panel on Climate Change, *Sixth Assessment Report: Climate Change 2023* (2023).
8. United Nations Economic Commission for Africa, *Climate Change and Development in Africa* (2021).
9. United Nations Economic Commission for Africa, *African Climate Policy Centre Report* (2022).
10. United Nations Environment Programme, *Indigenous Knowledge and Climate Adaptation* (2019).
11. United Nations Environment Programme, *Emissions Gap Report 2023* (2023).