

# Navigating legal pluralism in climate change loss and damage: Implementing the Sharm El Sheikh Funding Mechanism in Africa – Insights from transboundary case studies

*Rufaro Emily Chikuruwo*\*

Senior Postdoctoral fellow, North-West University, South Africa  
<https://orcid.org/0000-0002-1558-4892>

*Christa Rautenbach*\*\*

Professor of law, North-West University, South Africa  
<https://orcid.org/0000-0001-6641-0123>

**Abstract:** This article delves into the complex challenge of climate change-induced loss and damage in Africa, highlighting the role of legal pluralism and customary international law in implementing the Sharm El Sheikh Funding Mechanism. It argues that the integration of diverse legal systems is crucial for effectively addressing the multifaceted impacts of climate change across the continent. Through an analysis of four case studies, the article showcases the potential of legal pluralism to enhance the implementation of the funding mechanism, thus suggesting a more inclusive approach to climate governance. This approach not only recognises the value of diverse legal frameworks but also proposes a pathway towards sustainable and resilient climate adaptation and mitigation strategies in Africa. The article advocates a collaborative legal strategy that incorporates the complexities of legal pluralism into international climate change policies, aiming for a comprehensive and culturally-sensitive response to the climate crisis in vulnerable regions.

\* LLM (Venda) LLD (North-West); rufarochikuruwo@gmail.com.

\*\* LLM LLD (North-West); Christa.Rautenbach@nwu.ac.za.

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## 1 Introduction

Climate change has become one of the most pressing problems of the twenty-first century, inflicting continuous and significant loss and damage on both the global environment and populations.<sup>1</sup> Loss and damage are particularly acute in Africa, where many countries face severe climate impacts, exacerbating existing social and economic disparities.<sup>2</sup> Loss and damage refer to ‘the consequences of climate change that go beyond what people can adapt to, or avoid.’<sup>3</sup> Loss and damage is also described as the ‘destructive impacts of climate change that cannot be or have not been avoided by mitigation or adaptation measures.’<sup>4</sup> Mitigation refers to measures that seek to reduce the emission of greenhouse gases, while adaptation involves building resilience against current and future climate change effects.<sup>5</sup>

The international community has devised several innovative strategies to address loss and damage. One notable strategy in this respect is the Sharm El Sheikh Funding Mechanism, established during the 27th Conference of the Parties (COP 27) to the United Nations Framework Convention on Climate Change (UNFCCC).<sup>6</sup> This mechanism acknowledges the need to provide financial resources to assist vulnerable countries, particularly the least developed countries and small island developing states facing climate change-induced loss and damage.<sup>7</sup>

It is notable that loss and damage is a consequence of extreme weather patterns such as droughts, cyclones and heat waves.<sup>8</sup> It also results from slow-onset weather events such as desertification, rising sea levels, salinisation, glacial retreat, ocean acidification and land degradation. These damages can result in either permanent

1 E Boyd and others ‘Loss and damage from climate change: A new climate justice agenda’ (2021) 4 *One Earth* 1365, 1366; NWP Bhandari and others ‘What is loss and damage from climate change? 8 key questions, answered’ 2022, <https://www.wri.org/insights/loss-damage-climate-change> (accessed 12 July 2023).

2 UNDP *Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century* (2019).

3 Bhandari and others (n 1); CS Boda and others ‘Loss and damage from climate change and implicit assumptions of sustainable development’ (2021) 164 *Climatic Change* 1, 2.

4 LM Mathew & S Akter ‘Loss and damage associated with climate change impacts’ in W-Y Chen, T Suzuki & M Lackner (eds) *Handbook of climate change mitigation and adaptation* (2014) 1-5; C House ‘What is loss and damage?’ 2022, <https://www.chathamhouse.org/2022/08/what-loss-and-damage> (accessed 22 May 2023).

5 Mathew & Akter (n 4) 1-5.

6 UNFCCC *Sharm el-Sheikh directive on responding to loss and damage associated with the adverse effects of climate change* (2022).

7 UNFCCC (n 6) paras 1, 2 & 12.

8 Intergovernmental Panel on Climate Change ‘Climate change: A threat to human well-being and health of the planet: Taking action now can secure our future’ (2022); Boyd and others (n 1) 1365-1368.

loss or repairable damage.<sup>9</sup> For instance, examples include the loss of lives, the damage to low-lying islands due to rising seas, and the conversion of once-productive farmland into barren land due to droughts.<sup>10</sup> Loss and damage may further be classified into economic and non-economic loss and damage, although the two often overlap.

On the one hand, economic loss and damage refers to climate change effects that affect services, goods and services regularly traded in markets.<sup>11</sup> For example, it may manifest as damage to essential national, local scale property, infrastructure or disrupt the supply chain.<sup>12</sup> On the other hand, non-economic losses usually is the most distressing, for example, the loss of family members, the trauma of being compelled to move from ancestral homes and the disappearance of ways of living and cultures.<sup>13</sup> Tragic events such as the Madagascar famine and Cyclone Idai are notable examples of climate change-induced loss and damage with economic and non-economic implications.<sup>14</sup>

Given Africa's unique vulnerability to climate change, innovative solutions are imperative to address this global problem. This article delves into the legal domain to explore potential solutions, focusing specifically on the principles of customary international law and legal plurality. Legal plurality refers to 'the coexistence of multiple legal systems within a geographical area or society'.<sup>15</sup> In the context of climate change, it denotes the interaction of international, national and traditional systems that can be harnessed to address loss and damage. Customary international law, by contrast, encompasses 'international obligations arising from established international practices' rather than 'formal written conventions and treaties'.<sup>16</sup> In the context of climate change, customary international law could inform state behaviour in addressing climate-induced loss and damage by applying principles such as equity, responsibility and no harm.<sup>17</sup>

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- 9 TDP Watkiss, C Handley & R Butterfield 'The impacts and costs of climate change' (2005) *AEA Technology Environment* 3-17; Mathew & Akter (n 4) 1-5.
- 10 Mathew & Akter (n 4) 1-5; Intergovernmental Panel on Climate Change (n 8) 3-17.
- 11 RC Anzivino 'The economic loss doctrine: Distinguishing economic loss from non-economic loss' (2007) 91 *Marquette Law Review* 1081, 1082-1099; KE McNamara & G Jackson 'Loss and damage: A review of the literature and directions for future research' (2019) 10 *Wiley Interdisciplinary Reviews: Climate Change* 1, 4-6.
- 12 CJ Preston 'Challenges and opportunities for understanding non-economic loss and damage' (2017) 20 *Ethics, Policy and Environment* 143; Anzivino (n 11) 1081, 1082-1099.
- 13 S Fankhauser & S Dietz 'Non-economic losses in the context of the UNFCCC Work Programme on Loss and Damage' (2014) Centre for Climate Change Economics and Policy 3-7; KE McNamara and others 'Understanding and responding to climate-driven non-economic loss and damage in the Pacific Islands' (2021) 33 *Climate Risk Management* 5-8.
- 14 P Puri & V Puri 'The first climate change famine from 2017-2022? An analysis of the economics and geography of Great SUD drought of Madagascar (1901-2021)' (2022) 12 *Academia* 100; L Chapungu 'Mitigating the impact of cyclone disasters: Lessons from Cyclone Idai' (2020) *Africa Portal* 1-9.
- 15 KB Beckmann & B Turner 'Legal pluralism, social theory, and the state' (2018) 50 *Journal of Legal Pluralism and Unofficial Law* 261-262.
- 16 BA Hanifa 'The legal basis of the legitimacy of Security Council Resolutions' (2022) *Journal of Politic and Law Volume* 575, 590.
- 17 M Fitzmaurice & AV Rydberg 'Using international law to address the effects of climate change: A matter for the International Court of Justice?' (2023) 4 *Yearbook of International Disaster Law Online* 296-298.

This article argues that legal plurality and customary international law intersect in the context of climate change-induced loss and damage in Africa. The intersection of these principles can be gleaned from how African countries are grappling with the impacts of climate change. From Madagascar's famine to the loss of life as a result of Cyclone Idai, one notes the urgent need for robust, culturally-informed and internationally-recognised legal means to address loss and damage. By viewing these challenges through the lens of international customary law and statutory law, African nations are offered a tool to negotiate their unique realities and needs within the realm of international climate policy, as legal plurality plays a crucial role.

This article particularly examines how legal plurality and customary international law can facilitate the implementation of the Sharm El Sheikh Funding Mechanism, a promising strategy for addressing climate change-induced loss and damage in Africa. Additionally, it presents four case studies, providing insights into how legal plurality and customary international law can inform loss and damage strategies in the region, leading to a better understanding of rights, responsibilities and remedies in international climate change negotiations. Climate change-induced loss and damage poses significant challenges to Africa, necessitating innovative and multifaceted solutions. By leveraging legal plurality and customary international law, the continent can navigate its unique circumstances and requirements within the global efforts to combat climate change, ultimately contributing to a more sustainable and resilient future.

## 2 Conceptual framework

To comprehensively analyse the effects of climate change-induced loss and damage in Africa, this contribution examines key concepts and principles that underpin the discussion. Specifically, the focus lies on climate change-induced loss and damage in Africa, the Sharm El Sheikh Funding Mechanism, and the principles of legal pluralism and customary international law. Understanding these components is crucial for effectively addressing loss and damage in the context of climate change.

### 2.1 Climate change-induced loss and damage in Africa

Climate change-induced loss and damage has garnered significant attention and academic scrutiny in Africa due to the continent's vast diversity and heavy reliance on agriculture, making it one of the most vulnerable regions to climate change.<sup>18</sup> Consequently, Africa experiences both economic and non-economic loss and damage as a result.

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18 See the works of L Atwoli and others 'COP27 Climate Change Conference: Urgent action needed for Africa and the world' (2022) 23 *The Lancet Oncology* 1486-1488; C Toulmin *Climate change in Africa* (2009); AO Jegede 'Africa versus climate change loss and damages:

This vulnerability translates into climate change-induced economic and non-economic loss and damage. On the one hand, economic loss and damage can be quantified, including loss of agricultural output, damage to property and loss of income.<sup>19</sup> Madagascar is an illustrative example, where a severe drought has led to what is now called ‘the world’s first climate change famine.’<sup>20</sup> The country has been experiencing a severe drought escapade, with over a million people affected by hunger.<sup>21</sup> The drought has immensely disrupted the country’s agricultural activities, which employ approximately 80 per cent of the population and contribute close to a quarter of the country’s gross domestic product (GDP).<sup>22</sup> As a result, the drought has contributed to food insecurity and widespread unemployment, thereby economically weakening the country, which was still dealing with the effects of the COVID-19 pandemic.<sup>23</sup>

On the other hand, non-economic loss and damage is more difficult to quantify or to place monetary value upon.<sup>24</sup> It affects an individual’s life, mobility and health, society’s loss of cultural heritage or territory, loss of cultural identity, or loss of indigenous knowledge, and the environment through loss of ecosystem services and loss of biodiversity.<sup>25</sup> Cyclone Idai is a poignant example, tragically claiming the lives of more than 1 300 people in south-eastern Africa.<sup>26</sup> In 2020, nearly a year after the cyclone’s devastation, the aftermath remained starkly visible, with a staggering 8,7 million people grappling with severe hunger.<sup>27</sup> In Mozambique alone, over 100 000 individuals endured homelessness, their makeshift shelters serving as a reminder of the enduring impact of this natural disaster.<sup>28</sup>

In this light, climate change-induced loss and damage arguably has magnified Africa’s pre-existing economic and social vulnerabilities. If not addressed, it could push an additional 130 million Africans into extreme poverty by 2030.<sup>29</sup> Therefore, it is paramount to implement prompt and adequate measures that mitigate climate change impacts and adapt to its changes. Responding effectively

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Exploring AU regional channels for influencing national policy’ (2018) 5 *Journal of African Foreign Affairs* 207-226; R Mendelsohn and others ‘Climate change impacts on African agriculture’ (2000) 25 *Preliminary Analysis Prepared for the World Bank, Washington, District of Columbia* 1-25.

19 Anzivino (n 11) 1082-1099; McNamara & Jackson (n 11) 4-6.

20 Puri & Puri (n 14) 100-113; United Nations ‘Madagascar: Severe drought could spur world’s first climate change famine’ 2021, <https://news.un.org/en/story/2021/10/1103712> (accessed 29 May 2023).

21 United Nations (n 20); Puri & Puri (n 14) 100-113.

22 D Fayad ‘Food insecurity and climate shocks in Madagascar: Republic of Madagascar’ (2023) *Selected Issues Papers* 2 4; International Monetary Fund ‘Informality and growth in Madagascar’ (2023) 118 *International Monetary Fund Staff Country Reports* 31.

23 Fayad (n 22) 2-22; International Monetary Fund (n 22) 18-45.

24 Fankhauser & Dietz (n 13) 3-7; McNamara & Jackson (n 11) 5-8.

25 McNamara & Jackson (n 11) 5-8; Fankhauser & Dietz (n 13) 3-7.

26 Chapungu (n 14) 1-9; S Devi ‘Cyclone Idai: 1 month later, devastation persists’ (2019) 393 *The Lancet* 1585; BBC News ‘Cyclone Idai: How the storm tore into Southern Africa’ 2019, <https://www.bbc.com/news/world-africa-47638696> (accessed 2 July 2023).

27 Devi (n 26) 1585; Chapungu (n 26) 1-9.

28 As above.

29 World Bank *The interlocking challenges of climate change and poverty* (2023).

to climate change-induced loss and damage requires a multifaceted approach that acknowledges Africa's unique context and needs. This calls for a nuanced understanding of Africa's diverse legal frameworks, with the notion of legal plurality and customary international law playing a central role in this endeavour.

## 2.2 Legal plurality and customary international law

Legal plurality acknowledges the coexistence and interaction of multiple legal systems within a socio-political environment.<sup>30</sup> This recognition becomes significant in the context of climate change, where the interplay between domestic, international and customary international laws uniquely addresses environmental concerns.<sup>31</sup> An important manifestation of legal pluralism is customary international law.

Customary international law arises from consistent and general practices that states follow out of a sense of legal obligation.<sup>32</sup> The concept of international customary law often materialises through the regular and common practices of states. These practices create obligations under international law, thus governing state behaviour in the absence of treaty law.<sup>33</sup> In the context of climate change, customary international law could guide state actions and address climate change-induced loss and damage through principles such as responsibility, no harm and equity. The responsibility principle obligates states to reduce, prevent and control environmental harm within their jurisdiction.<sup>34</sup> For instance, nations that rely heavily on fossil fuel energy production, such as oil, coal or gas, must move towards sustainable energy sources. Thus, countries such as South Africa, which rely heavily on coal for energy, could face international pressure to move towards more sustainable energy sources. Similarly, states could be held accountable for failing to take adequate measures to prevent damage caused by slow-onset climatic changes or extreme weather events if they had the knowledge and capacity to do so.

In addition to states having the responsibility to prevent harm to themselves, they bear an equally vital duty to avoid harm to other states. This 'responsibility' ushers in the crucial no-harm principle, dictating that no state should employ its resources in a way that inflicts damage upon others.<sup>35</sup> The no-harm principle

30 Beckmann & Turner (n 15) 261-262; B Dupret 'Legal pluralism, plurality of laws, and legal practices' (2007) *European Journal of Legal Studies* 1-26.

31 Beckmann & Turner (n 13) 261-262.

32 Hanifa (n 16) 590; M Wood 'Customary international law and the general principles of law recognized by civilized nations' (2019) 21 *International Community Law Review* 307-324.

33 Hanifa (n 16) 590.

34 C Voigt 'State responsibility for climate change damages' (2008) 77 *Nordic Journal of International Law* 1-22; RS Tol & R Verheyen 'State responsibility and compensation for climate change damages – A legal and economic assessment' (2004) 32 *Energy Policy* 1109-1111, 1129.

35 B Mayer 'The relevance of the no-harm principle to climate change law and politics' (2016) 19 *Asia Pacific Journal of Environmental Law* 79-81, 103, 104; J Gupta & S Schmeier 'Future

is common in international environmental law and could be applied to climate change-induced loss and damage. In the African context, the ‘no-harm’ principle assumes particular relevance for nations on the continent that endure the adverse consequences of climate change, ostensibly triggered primarily by emissions from emerging and developed economies. As an illustration, coastal nations such as Mozambique, confronted with rising sea levels and a heightened cyclone frequency, could argue that high-emitting countries are infringing upon the no-harm principle.

Such an argument holds significant potential when engaging in international climate negotiations, serving as a powerful impetus to demand more robust commitments and financial assistance from high-emitting nations. This aid would not only mitigate the far-reaching effects of climate change but also compensate for the loss and damage these vulnerable African nations have suffered. Through invoking the ‘no-harm’ principle, they can strive for a more equitable and effective collective effort to combat the challenges posed by climate change, fostering a sense of global responsibility and solidarity.

Equity, another critical principle of customary international law, entails fairness and justice based on the historical responsibilities and capabilities of states.<sup>36</sup> For instance, developed countries, historically contributing more to the global emission of greenhouse gases,<sup>37</sup> should bear a greater responsibility in combating climate change and supporting vulnerable states that would have suffered climate change loss and damage.<sup>38</sup> In the Paris Agreement, developed states have pledged to financially support developing states in their climate change loss and damage mitigation and adaptation efforts.<sup>39</sup>

Another key initiative to fulfil this commitment is the Green Climate Fund, wherein developed nations pledged to mobilise \$100 billion annually by 2020 to assist developing nations, including African countries, in their climate change loss and damage mitigation and adaptation efforts.<sup>40</sup> The promise of such substantial financial assistance is a critical step towards fostering international cooperation

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proofing the principle of no significant harm’ (2020) 20 *International Environmental Agreements: Politics, Law and Economics* 731-733.

36 SK Chattopadhyay ‘Equity in international law: Its growth and development’ (1975) 5 *Georgia Journal of International and Comparative Law* 382-383; M Akehurst ‘Equity and general principles of law’ (1976) 25 *International and Comparative Law Quarterly* 801, 802.

37 As of 2023, countries such as China, the United States, India, the EU27, Russia and Brazil were responsible for 61.6% of global GHG emissions. M Crippa and others *GHG emissions of all world countries* (2021) 3-5, <https://dx.doi.org/10.2760/173513> (accessed 7 December 2023).

38 M Banks ‘Individual responsibility for climate change’ (2013) 51 *Southern Journal of Philosophy* 42; United Nations Framework Convention on Climate Change (Treaty Doc 102-38, 1771 UNTS 107) (1992) 2, 42, 43; P Nadja & B Plumer ‘Who has the most historical responsibility for climate change?’ 2021, <https://www.nytimes.com/interactive/2021/11/12/climate/cop26-emissions-compensation.html> (accessed 22 July 2023).

39 United Nations Framework Convention on Climate Change (UNFCCC) (COP21 Adoption of Paris Agreement) (2015) arts 3, 4, 6 & 7.

40 J Timperley ‘The broken \$100-billion promise of climate finance – and how to fix it’ (2021) 598 *Nature* 400-402.



and solidarity in addressing the challenges posed by climate change, empowering developing nations to forge a more sustainable and secure future. While the Green Climate Fund signifies a noteworthy commitment from developed nations to mobilise \$100 billion annually, the realisation of this pledge has been inconsistent since the Copenhagen conference. The Nairobi Declaration 2023,<sup>41</sup> echoing calls from African leaders, underscores the imperative for developed countries to fulfil their financial obligations. This emphasises the crucial necessity for tangible support in both mitigating and adapting to the impacts of climate change in developing nations.

While these principles are essential tools to manage the impacts of climate change, their efficacy in the African context could be constrained by various factors, such as the imbalance of bargaining power or influence in international climate change negotiations, the challenge in enforcing customary international law, and the challenge of reconciling different legal systems within a plural legal environment. It is, thus, important to enrich these principles with solid international measures and funding mechanisms. Such approach leads to a consideration of global efforts that have been put in place to address climate change-induced loss and damage. Global efforts that address climate change-induced loss and damage have been codified in international agreements such as the Paris Agreement and the Sharm El Sheikh Funding Mechanism.<sup>42</sup> These instruments are meant to implement the principles of responsibility, no-harm and equity and to translate these into practical support measures for countries undergoing climate change-induced loss and damage.<sup>43</sup>

### 2.3 The Paris Agreement and the Sharm El Sheikh Funding Mechanism

The global community's response to climate change is regulated by frameworks established under the UNFCCC.<sup>44</sup> The UNFCCC serves as the principal platform for climate change international cooperation.<sup>45</sup> It provides a comprehensive framework aimed at stabilising greenhouse gas concentrations in the atmosphere by reducing any dangerous human interference with the climate system.<sup>46</sup>

Building upon the foundation laid by the UNFCCC, the Paris Agreement, adopted in 2015, articulates specific goals and actions to address climate change.<sup>47</sup>

41 African Union 'The African Leaders Nairobi Declaration on Climate Change and Call to Action Preamble' (8 September 2023), <https://au.int/en/decisions/african-leaders-nairobi-declaration-climate-change-and-call-action-preamble> (accessed 7 December 2023).

42 Paris Agreement (n 39); UNFCCC (n 6).

43 BB Zardari 'The loss and damage facility: A step towards climate justice' 2022, <https://www.un.org/en/un-chronicle/loss-and-damage-facility-step-towards-climate-justice> (accessed 10 July 2023).

44 UNFCCC (n 39).

45 As above.

46 UNFCCC (n 39) 2, 4 & 6.

47 Paris Agreement (n 39) art 2.



Its primary objective is to reduce global warming to well below 2°C above pre-industrial levels.<sup>48</sup> Moreover, the agreement recognises loss and damage as a significant issue in article 8(4). While the Paris Agreement does not provide a compensation mechanism for loss and damage, it nonetheless urges countries to enhance loss and damage cooperation, facilitation, understanding, action and support through the Warsaw International Mechanism.<sup>49</sup>

Article 9(1) of the Paris Agreement also encourages developed countries to provide financial resources to assist developing countries with loss and damage mitigation and adaptation. In the context of Africa, the UNFCCC and the Paris Agreement play a pivotal role by providing the basis upon which African countries can demand action and support from the international community.<sup>50</sup> However, the effective implementation of the provisions of these agreements within domestic laws and customary practices in Africa's pluralistic legal systems is a complex challenge.

To address this complexity, the Sharm El Sheikh Funding Mechanism, established during the 27th United Nations Conference of Parties (COP27), offers a promising avenue for financial support to African nations affected by climate change.<sup>51</sup> The Sharm El Sheikh Funding Mechanism embodies a systematic strategy for financial assistance, guaranteeing the effective distribution of resources to the most vulnerable African countries.<sup>52</sup> At its essence, this mechanism is structured around pivotal areas of vulnerability, such as food security, water scarcity, and infrastructure resilience.<sup>53</sup>

The Sharm El Sheikh Funding Mechanism represents the commitment made by developed countries under the Paris Agreement to financially assist developing countries in their climate change mitigation and adaptation efforts.<sup>54</sup> It seeks to enhance the capacity of African countries to cope with climate change-induced loss and damage, funding various projects, including infrastructure development, technological innovation and capacity-building initiatives.<sup>55</sup> The dynamic nature of the Sharm El Sheikh Funding Mechanism allows for adaptive responses to the evolving impacts of climate change, thereby ensuring that funding is directed towards both immediate needs and long-term adaptation strategies.<sup>56</sup> This includes supporting projects that strengthen community resilience, foster technological innovation for climate adaptation, and enhance local capacities

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48 As above.

49 United Nations Framework Convention on Climate Change (COP 19 Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts) (2013).

50 UNFCCC (n 49) art 2 & 11; Paris Agreement (n 39) arts 2 & 25.

51 UNFCCC (n 6) 4, 6 & 7.

52 As above.

53 As above.

54 As above.

55 As above.

56 As above.

through educational and training initiatives.<sup>57</sup> The mechanism also emphasises transparency and accountability in fund allocation, involving a collaborative process with recipient countries to identify priority areas and track the impact of investments.<sup>58</sup>

However, the effectiveness of the Sharm El Sheikh Funding Mechanism hinges on its implementation, which is far from straightforward. For the mechanism to be successful, it must account for the specific climate vulnerabilities, economic situation and legal landscape of each recipient country. The funds should be directed strategically to initiatives that address not just the symptoms but the root causes of vulnerability to climate change.

Furthermore, the effectiveness of the Sharm El Sheikh Funding Mechanism is significantly influenced by the legal complexity within African nations, which is marked by the coexistence of multiple normative systems such as customary law, state law and international law. As such, while the Sharm El Sheikh Funding Mechanism is a promising initiative, it still presents the challenge of harmonising these legal systems to ensure the effective and equitable distribution of funds. The exploration of these challenges and the examination of how African nations can navigate the intricacies of this new funding mechanism are imperative. Equally vital is the investigation into how the interactions between legal plurality, customary international law and the Sharm El Sheikh Funding Mechanism could influence Africa's response to climate change-induced loss and damage. This article presents four compelling case studies to shed light on the transformative potential of the Sharm El Sheikh Funding Mechanism in advancing climate justice in Africa.

By delving into these specific four scenarios, we aim to unveil the mechanism's capacity to address the pressing climate-related issues faced by African countries. Through insightful analysis and a comprehensive understanding of the mechanism's dynamics, we hope to identify opportunities for collaboration and effective implementation. Ultimately, we endeavour to contribute to a more equitable and sustainable response to climate change in Africa, leveraging the potential of the Sharm El Sheikh Funding Mechanism as a powerful tool for positive change.

### 3 Case study 1: Cyclone Idai (Mozambique, Malawi and Zimbabwe)

In March 2019 Southeast Africa experienced one of the most devastating tropical cyclones recorded in the southern hemisphere.<sup>59</sup> On 14 March 2019 Cyclone

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57 As above.

58 As above.

59 Devi (n 26) 1585; BBC News (n 26).

Idai struck near Beira, Mozambique, before moving inland into Malawi and Zimbabwe.<sup>60</sup> The devastating cyclone was accompanied by heavy rains, which resulted in severe flooding. The flooding caused massive destruction to homes, schools, hospitals and other essential infrastructure.<sup>61</sup> Cyclone Idai became a manifestation of climate change-induced extreme weather events, causing significant loss and damage to human life, property, infrastructure, economic disruption and agricultural land. It resulted in an estimated 1 300 deaths and affected more than 3 million people across Mozambique, Malawi and Zimbabwe.<sup>62</sup> The cyclone and its subsequent flooding also triggered large-scale displacement of people, with many losing their homes and means of livelihood, thereby deepening poverty and food insecurity in an already vulnerable region.<sup>63</sup>

In the aftermath of this catastrophe, the Sharm El Sheikh Funding Mechanism could play a crucial role in assisting these affected nations' recovery and resilience-building processes. In other words, the Sharm El Sheikh Funding Mechanism could be instrumental in climate action initiatives such as climate resilience. Climate resilience is described as 'the ability to prepare for, recover from, and adapt to' the impacts of climate change.<sup>64</sup> Investing in climate action initiatives such as climate resilience can aid these nations in rebuilding damaged infrastructure, supporting displaced communities, and implementing early warning systems and disaster risk reduction measures.

However, the application of these funds faces complexities due to the different legal systems within and across the affected countries. Mozambique, Malawi and Zimbabwe all possess a unique blend of laws, encompassing colonial era legislation, state law and customary law.<sup>65</sup> Since climate-induced disasters such as Cyclone Idai transcend national boundaries, effective regional coordination and cooperation have become necessary. Consideration must be given to customary land rights, which may not always align with formal property rights under national laws, while reconstructing infrastructure and rehousing displaced communities through the Sharm El Sheikh Funding Mechanism.

In addition, regional cooperation is also crucial when dealing with transboundary disasters such as Cyclone Idai. In this respect, principles of

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60 BBC News (n 26); Chapungu (n 26) 1-3.

61 Chapungu (n 26) 1-5.

62 Devi (n 26) 1585; BBC News (n 26).

63 As above.

64 Centre for Climate and Energy Solutions 'What is climate resilience, and why does it matter?' (2019) 1, 2, <https://www.c2es.org/document/what-is-climate-resilience-and-why-does-it-matter/> (accessed 7 December 2023).

65 See in general the works of L Madhuku *An introduction to Zimbabwean law* (2010) 13-35; JA Bennett 'The legal system of Zimbabwe' (1982) 22 *Zimbabwe Law Journal* 147-161; D Isser *Customary justice and the rule of law in war-torn societies* (2011) 13-76; A Gundersen 'Popular justice in Mozambique: Between state law and folk law' (1992) 1 *Social and Legal Studies* 257-282; M Mkandawire 'The Malawi legal system' (2003) 15 *Commonwealth Judicial Journal* 33-38; P Virtanen 'The politics of law in Mozambique: Customary authority and changing premises of legal reform' (2004) 17 *International Journal for the Semiotics of Law/Revue internationale de Sémiotique juridique* 53-75.

customary international law, such as international cooperation and shared responsibility, should be applied to guide the fair and effective distribution and utilisation of the Sharm El Sheikh Funding Mechanism. Applying these principles could involve the development of a regional action plan that respects the legal plurality of the individual countries while establishing a common framework for action. In this light, the Sharm El Sheikh Funding Mechanism could bolster regional organisations' capacity, such as the Southern African Development Community (SADC), in coordinating cross-border climate change mitigation and adaptation efforts. The Sharm El Sheikh Funding Mechanism could also support initiatives that aim to harmonise the diverse legal systems within these countries to create a more conducive environment for climate change adaptation and mitigation. SADC, for example, could coordinate efforts to enhance early warning systems across member countries and spearhead regional initiatives on climate-resilient agriculture, flood control and reforestation. These initiatives need to respect the legal plurality of the individual countries while establishing a common framework for action.

Moreover, the rights and interests of local communities should be a central focus in the application of the funds. Participatory approaches, informed by customary laws and practices, can help ensure that the measures taken are culturally appropriate and effective. Furthermore, the rights of displaced communities, particularly their right to return to their ancestral/cultural places, housing and property, should be respected and protected. In conclusion, the success of the Sharm El Sheikh Funding Mechanism in the context of Cyclone Idai will largely depend on how effectively it navigates the challenges posed by legal plurality and transboundary climate disasters. Its ability to incorporate customary international law principles, particularly in the area of regional cooperation and shared responsibility, will be crucial in this regard.

#### 4 Case study 2: Lake Chad basin (Chad, Cameroon, Niger and Nigeria)

Once the 'sixth-largest lake in the world', Lake Chad has been dramatically shrinking since the 1960s.<sup>66</sup> The lake has shrunk by approximately 90 per cent since the 1960s due to climate change, changes in rainfall patterns, and the overuse of water resources.<sup>67</sup> Lake Chad spans Chad, Cameroon, Niger and Nigeria, and its reduction in size has caused severe socio-economic loss, ecological loss and

66 Earth Resources Observation and Science Centre 'Lake Chad, West Africa', <https://eros.usgs.gov/media-gallery/earthshot/lake-chad-west-africa> (accessed 1 July 2023).

67 European Space Agency 'Lake Chad's shrinking waters' 2019, [https://www.esa.int/ESA\\_Multimedia/Images/2019/03/Lake\\_Chad\\_s\\_shrinking\\_waters#:~:text=Once%20one%20of%20Africa's%20largest,increasing%20human%20demand%20for%20freshwater](https://www.esa.int/ESA_Multimedia/Images/2019/03/Lake_Chad_s_shrinking_waters#:~:text=Once%20one%20of%20Africa's%20largest,increasing%20human%20demand%20for%20freshwater) (accessed 30 June 2023).

damage, affecting over 30 million people who depend on the lake for survival.<sup>68</sup> Lake Chad's shrinkage due to climate change has caused substantial climate change-induced loss and damage. It has, for example, affected fishing, agriculture and livestock farming, the primary livelihood sources for the local communities.<sup>69</sup> The reduced availability of water has also heightened competition among local communities and nations, leading to conflicts and the displacement of people.<sup>70</sup> The desertification caused by the receding lake has further compounded these problems by reducing arable land and causing biodiversity loss.<sup>71</sup> As a result, this desertification has led to massive displacement of people, with approximately 2,5 million individuals internally displaced or living as refugees across the four countries.<sup>72</sup>

Established as a tool to provide financial support to nations affected by climate change, the Sharm El Sheikh Funding Mechanism could be a significant source of funds for restoration and adaptation projects in the Lake Chad basin. The funds can be used for a wide range of projects, including the rehabilitation of the lake's ecosystem, the promotion of sustainable water and land management practices, renewable energy projects, ecosystem-based adaptation strategies, and the development of climate-resilient agriculture and fisheries.

However, applying this mechanism effectively in the Lake Chad context is complex. The lake's transboundary nature and the differing legal systems in Chad, Cameroon, Niger and Nigeria present a significant challenge. Each of the four countries has a unique blend of legal influences, including French civil law in Chad and Cameroon, English common law in Nigeria, and Islamic law in Niger.<sup>73</sup> In addition to this, a myriad of customary laws is practised by local communities.<sup>74</sup> The result is a complex, pluralistic legal landscape. Implementing

68 European Space Agency (n 67); SJR Mahmood, T Mahmood & A Mehmood 'Predicted and projected water resources changes in the Chari catchment, the Lake Chad Basin, Africa' (2020) *Journal of Hydrometeorology* 73, 74.

69 Mahmood and others (n 68) 73-91; KRA Mohanty, S Ngueping & SS Nanda 'Climate change, conflict: What is fuelling the Lake Chad crisis' 2021, <https://www.downtoearth.org.in/blog/climate-change/climate-change-conflict-what-is-fuelling-the-lake-chad-crisis-75639> (accessed 27 June 2023).

70 UT Okpara, LC Stringer & AJ Dougill 'Lake drying and livelihood dynamics in Lake Chad: Unravelling the mechanisms, contexts and responses' (2016) *National Library of Medicine* 781-795; Mohanty and others (n 69).

71 Mohanty and others (n 69).

72 As above.

73 N Ngarhodjim 'An introduction to the legal system and legal research in Chad' in GlobaLex, Hauser School of Law Programme 2019, <https://www.nyulawglobal.org/globalex/Chad1.html> (accessed 28 November 2023); United States Department of States 'Chad' Diplomacy in Action 2014, <https://2009-2017.state.gov/documents/organization/228170.pdf> (accessed 28 November 2023); EM Koumassol 'The legal system and language policy of Cameroon' in EM Koumassol (ed) *Language and legal proceedings: Analysing courtroom discourse in Cameroon* (2021) 9-18; EN Ngwafor 'Cameroon: The law across the bridge: Twenty years (1972-1992) of confusion' (1995) 26 *Revue générale de droit* 66-77; R Zahn 'Human rights in the plural legal system of Nigeria' (2009) 1 *Edinburgh Student Law Review* 66-89; C Mwalimu *The Nigerian legal system* (2005) 29-40.

74 Ngwafor (n 73) 66-77; Zahn (n 73) 66-89; A Ponce 'The rule of law in Niger' (2020) 1-40, [https://worldjusticeproject.org/sites/default/files/documents/WJP\\_ROL%20in%20Niger\\_Jun2020.pdf](https://worldjusticeproject.org/sites/default/files/documents/WJP_ROL%20in%20Niger_Jun2020.pdf) (accessed 28 November 2023).

projects funded by the Sharm El Sheikh mechanism in this setting would require one to acknowledge these different legal systems. For example, a project aimed at promoting sustainable fishing practices should consider both formal fishing regulations and local customary fishing rights and practices.

Furthermore, the equitable and efficient use of the mechanism's funds requires improved transboundary cooperation. Principles of customary international law, such as the duty to prevent harm to other states, and the equitable and reasonable utilisation of shared resources can provide a framework for this cooperation. A shared management body for the Lake Chad basin could be established to facilitate the joint planning and implementation of projects. This body, guided by these principles, could facilitate project collaborative planning and implementation and include representation from all stakeholder groups, including national and local governments, non-governmental organisations (NGOs) and local communities. This inclusivity is crucial for resolving legal conflicts and ensuring the effective and efficient use of funds. For instance, with their intimate knowledge of the lake and its ecosystem, local communities can provide invaluable input on project planning and implementation.

In addition, engaging local communities in this way can help ensure that the funded projects respect and enhance traditional livelihoods and practices. By involving local communities, the projects can be tailored to support traditional water-saving techniques or invest in community-led initiatives for conflict resolution and livelihood diversification, among other aspects. Consequently, the Sharm El Sheikh Funding Mechanism holds considerable promise for addressing climate change-induced loss and damage in the Lake Chad basin. However, realising this promise requires navigating a complex, pluralistic legal landscape, promoting transboundary cooperation, and actively engaging local communities in decision-making processes. Although this could be a challenging task, it could significantly restore Lake Chad basin's health and its dependent communities' livelihoods.

## 5 Case study 3: The Nile basin (Egypt, Sudan, Ethiopia and other countries)

The Nile basin case study is a further typical example of the complexity of managing climate change-induced loss and damage in a transboundary context, where different legal systems, cultural practices and historical precedents coexist. The Nile river is one of the world's longest rivers.<sup>75</sup> It spans 11 countries, namely, Egypt, Sudan, Ethiopia, Uganda, Kenya, Tanzania, Rwanda, Burundi, the

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75 SCG Magdi & HH Edwin 'Nile river' 2023, <https://www.britannica.com/place/Nile-River> (accessed 1 July 2023.); M Kimenyi & J Mbaku *Governing the Nile river basin: The search for a new legal regime* (2015) 5-23.

Democratic Republic of the Congo (DRC), Eritrea and South Sudan.<sup>76</sup> Each of these countries has a unique legal and governance framework currently facing the mounting pressures of climate change.<sup>77</sup>

The effects of climate change are many and devastating. Unpredictable rainfall patterns and prolonged droughts have disrupted traditional farming practices and diminished agricultural output.<sup>78</sup> For example, in Ethiopia, where approximately 85 per cent of the population relies on rain-fed agriculture, irregular weather patterns have resulted in droughts and floods, causing substantial crop losses.<sup>79</sup> On the other hand, increased temperatures have led to increased evaporation rates, which have caused significant water shortages in countries such as Egypt, which is highly dependent on the Nile for its freshwater supplies.<sup>80</sup>

The Sharm El Sheikh Funding Mechanism has the potential to provide much-needed financial resources to mitigate these climate-related impacts and strengthen the resilience of Nile basin countries. The funding could support various initiatives, such as improving water irrigation and storage systems in Sudan, implementing climate-resilient agricultural practices in Ethiopia, or developing early warning systems and coastal protection measures in Egypt.

However, effectively applying the Sharm El Sheikh Funding Mechanism poses a significant challenge due to the diverse legal landscapes of the Nile basin countries. These legal differences range from civil law systems in countries such as Egypt and Sudan to common law systems in Kenya and Tanzania.<sup>81</sup> Simultaneously, numerous customary laws within the countries and Islamic

76 KD Rizzolio 'Water sharing in the Nile river valley' (2000) 1-85; Magdi & Edwin (n 75).

77 SB Awulachew and others *The Nile river basin: Water, agriculture, governance and livelihoods* (2012) 5-30; AM Melesse and others *Nile river basin: Ecohydrological challenges, climate change and hydro politics* (2014) 7-22, 339-476; TB Tariku and others 'Impact of climate change on hydrology and hydrologic extremes of upper blue Nile river basin' (2021) 147 *Journal of Water Resources Planning and Management* 1-12.

78 Melesse and others (n 77) 7-22, 339-476; U Kim & JJ Kaluarachchi 'Climate Change Impacts on Water Resources in the Upper Blue Nile River Basin, Ethiopia 1' (2009) 45 (6) *Journal of the American Water Resources Association* 1361-1378.

79 Kim & Kaluarachchi (n 78) 1361-1378; D Mengistu and others 'Climate change impacts on water resources in the Upper Blue Nile (Abay) river basin, Ethiopia' (2021) 592 *Journal of Hydrology* 1-13; B Getachew & BR Manjunatha 'Potential climate change impact assessment on the hydrology of the Lake Tana basin, Upper Blue Nile river basin, Ethiopia' (2022) 127 *Physics and Chemistry of the Earth* 1-16.

80 MEDM Omar and others 'Impacts of climate change on water quantity, water salinity, food security, and socioeconomy in Egypt' (2021) 14 *Water Science and Engineering* 17-27; TA Gado & DE El-Agha 'Climate change impacts on water balance in Egypt and opportunities for adaptations' (2021) *Agro-environmental Sustainability in MENA Regions* 13-47.

81 M Raffa 'The Egyptian legal system an inside look' (2014) 2; MI Khalil 'The legal system of the Sudan' (1971) 20 *International and Comparative Law Quarterly* 624-626; G Munoru 'The development of the Kenya legal system, legal education and legal profession' (1973) 9 *East African Law Journal* 1-10; F DuBow 'Language, law, and change: Problems in the development of a national legal system in Tanzania' (1976) *Language and Politics* 85-99; J Vanderlinden 'Civil law and common law influences on the developing law of Ethiopia' (1966) 16 *Buffalo Law Review* 250-266; B Muhire 'Legal pluralism, customary authority and conflict in Masisi, (Eastern) Democratic Republic of Congo' (2017) 1 *Journal of Sociology and Development* 1-21; H Dunn 'Emergent hybrid legality: A study of legal encounters in the DRC' (2021) 15 *Journal of Intervention and Statebuilding* 201-220.



law influences in countries such as Sudan and Egypt make the application of the Sharm El Sheikh Funding Mechanism all the more complex.<sup>82</sup> Navigating this legal pluralism to implement climate mitigation and adaptation projects effectively demands a careful balance and integration of various legal principles and norms.

Existing water allocation disputes, particularly between Egypt, Sudan and Ethiopia, further complicate matters. The ongoing disagreement over Ethiopia's Grand Ethiopian Renaissance Dam (GERD) highlights the clash of national interests and differing interpretations of the principles of customary international law, such as equitable and reasonable utilisation of shared resources and the obligation not to cause significant harm to other states.<sup>83</sup> Ethiopia's GERD was constructed to produce hydro-electric power for its rapidly-growing economy.<sup>84</sup> The construction of GERD has raised concerns in Egypt and Sudan about potential decreases in the Nile's water flow and ushers in the principles of customary international law.<sup>85</sup> The principle of equitable and reasonable utilisation of shared resources posits that countries that share transboundary waters should utilise these in an equitable and reasonable manner to all basin states. However, what is considered 'equitable' or 'reasonable' often is subjective and a matter of intense disputes and negotiations.

The principle of equitable and reasonable utilisation of shared resources also states that no country should cause significant harm to other countries while utilising shared resources. Applying this principle again is a contentious point in the Nile basin case, particularly concerning Ethiopia's dam project. There is, therefore, a need to enhance transboundary cooperation and governance. A potential solution could be the formation of a comprehensive, basin-wide management and cooperation body, including representation from all basin countries and key stakeholders. This body could coordinate efforts, mediate disputes, and ensure the Sharm El Sheikh Funding Mechanism's funds are utilised effectively and equitably, following the principles of both local and international laws. The Nile basin highlights the critical role of cooperation, respect for multiple legal systems, and the strategic use of funds such as the Sharm El Sheikh Mechanism in mitigating climate change impacts in Africa. Its unique challenges underscore the urgent need for integrated and mutually-respectful approaches to addressing shared climate crises.

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82 Khalil (n 81) 624-644; A Swain 'Ethiopia, the Sudan, and Egypt: The Nile river dispute' (1997) 35 *Journal of Modern African Studies* 675-695; Raffa (n 81) 4.

83 NV Pemunta and others 'The Grand Ethiopian Renaissance dam, Egyptian national security, and human and food security in the Nile river basin' (2021) 7 *Cogent Social Sciences* 1-18; Y Yihdego and others 'Nile river's basin dispute: Perspectives of the Grand Ethiopian Renaissance dam (GERD)' (2017) 17 *Global Journal of Human-Social Science* 1.

84 Pemunta and others (n 83) 1-18; Yihdego and others (n 83) 1.

85 As above.

## 6 Case study 4: The Congo basin (Congo, DRC, Cameroon, Central African Republic, Gabon and Equatorial Guinea)

The Congo basin has been classified as the world's second-largest tropical rainforest.<sup>86</sup> It is an essential life support system for six nations, namely, the Republic of Congo, DRC, Cameroon, the Central African Republic (CAR), Gabon and Equatorial Guinea.<sup>87</sup> The forest has been labelled as the 'the lungs of Africa' because it acts as a vast carbon sink that stores an estimated 29 billion tons of carbon.<sup>88</sup> The Congo basin is also home to an incredible range of biodiversity, including endangered species such as forest elephants and lowland gorillas.<sup>89</sup>

However, climate change, deforestation and illegal logging have threatened this vital ecosystem.<sup>90</sup> Deforestation rates have surged in the DRC, a country with over 60 per cent of the Congo basin's forests,<sup>91</sup> leading to significant biodiversity loss, increased carbon emissions, and disruption of livelihoods of forest-dependent communities. For example, in 2018 alone, over one million hectares of primary forest were lost.<sup>92</sup> The loss of access to the forest's resources has notably impacted the people's food security and income generation. For example, many indigenous communities in Cameroon, such as the Baka and Bagyeli, rely heavily on the forest's resources for hunting, gathering and small-scale farming.<sup>93</sup> The degradation of the forest's ecosystem directly threatens their traditional way of life.

On this note, the Sharm El Sheikh Funding Mechanism presents a crucial opportunity to finance measures to address these issues. The mechanism's funds could support many initiatives, such as sustainable forestry practices, community-based conservation projects and the promotion of alternative livelihoods. For instance, in Gabon, a country which has managed to maintain a high forest

86 TC Resende & AG Meikengang 'Regional cooperation for the conservation of biodiversity in the Congo basin forests: Feedback on actions carried out in the TRIDOM-TNS landscapes' (2023) *Managing Transnational UNESCO World Heritage Sites in Africa* 135.

87 KT Nsah 'Conserving Africa's Eden? Green colonialism, neoliberal capitalism, and sustainable development in Congo basin literature' (2023) 12 *Humanities* 1; Resende & Meikengang (n 86) 63.

88 EL Molua 'Global warming and carbon sequestration in Africa's forests: Potential rewards for new policy directions in the Congo basin' (2019) *New Frontiers in Natural Resources Management in Africa* 55-77; Nsah (n 87) 1; United Nations Environment Programme 'Critical ecosystems: Congo basin peatlands' 2023, <https://www.unep.org/news-and-stories/story/critical-ecosystems-congo-basin-peatlands> (accessed 22 June 2023).

89 A Pyhälä and others 'Protected areas in the Congo basin: Failing both people and biodiversity' (2016) *WRM Bulletin* 6, 91, 133.

90 As above.

91 International Monetary Fund (n 22) 7-9.

92 V Schneider 'Poor governance fuels "horrible dynamic" of deforestation in DRC' 2020, <https://news.mongabay.com/2020/12/poor-governance-fuels-horrible-dynamic-of-deforestation-in-drc/> (accessed 19 June 2023); International Monetary Fund (n 22) 8.

93 R Few and others 'Trade-offs in linking adaptation and mitigation in the forests of the Congo basin' (2017) 17 *Regional Environmental Change* 851-863; JN Nkem and others 'Profiling climate change vulnerability of forest indigenous communities in the Congo basin' (2013) 18 *Mitigation and Adaptation Strategies for Global Change* 513-533.

cover,<sup>94</sup> funding could be utilised to strengthen its existing network of national parks. The Sharm El Sheikh Funding Mechanism could also bolster sustainable tourism initiatives.

However, like the case studies above, it is a challenge to effectively apply the Sharm El Sheikh Funding Mechanism given the diverse legal landscapes of the Congo basin countries. Each of these nations operates under a distinct legal system. For instance, the Republic of Congo and Gabon have French civil law; Cameroon has dual French civil law and English common law; and there are various customary laws among indigenous and local communities.<sup>95</sup> Moreover, property rights, land tenure systems and natural resource management regulations differ widely across these countries, creating potential conflicts and obstacles in implementing conservation and adaptation projects.<sup>96</sup>

To make the best use of the Sharm El Sheikh Funding Mechanism's resources, harmonising these laws and respecting the rights and traditions of local communities are essential. Recognising and strengthening community forest rights, a form of customary law, can be a powerful tool for forest conservation and improving local livelihoods. Moreover, given the transboundary nature of the Congo basin, enhanced cooperation between the six nations is paramount, guided by principles of customary international law. Establishing a shared management body for the Congo basin, akin to the Nile basin initiative, with representatives from all stakeholder groups, can ensure a coordinated, inclusive approach to managing the basin's resources and implementing funded projects.

In conclusion, the Congo basin case illustrates the complexities of addressing climate change in shared ecosystems, necessitating legal pluralism, customary international law, and the effective use of funds such as the Sharm El Sheikh Mechanism. By skilfully blending these elements, we can safeguard critical ecosystems such as the Congo basin and secure a sustainable future for the communities that rely on them.

## 7 Conclusion and recommendations

As the case studies above demonstrate, climate change-induced loss and damage presents significant challenges to Africa. Each case study illustrates the complex nature of climate change effects, intensified by unique geographical,

94 F James 'Gabon leads Africa in the preservation and conservation of forests' 2021, [https://www.undp.org/fr/gabon/news/gabon-leads-africa-preservation-and-conservation-forests#:~:text=Gabon%20is%20one%20of%20the,km%20C2%B2\)%20covered%20by%20rainforests.](https://www.undp.org/fr/gabon/news/gabon-leads-africa-preservation-and-conservation-forests#:~:text=Gabon%20is%20one%20of%20the,km%20C2%B2)%20covered%20by%20rainforests.) (accessed 1 July 2023).

95 Muhire (n 81) 1-21; Dunn (n 81) 201-220; Koumassol (n 73) 9-18; JF Barnes 'The Republic of Gabon' (2004) *Southwestern Journal of International Studies* 67-102.

96 Barnes (n 95) 67-102; HCP Brown and others 'Institutional perceptions of opportunities and challenges of REDD in the Congo basin' (2011) 20 *Journal of Environment and Development* 381-404.

socio-economic and political contexts. Addressing these challenges requires a multifaceted approach that includes transboundary cooperation, recognising the importance and application of legal pluralism and customary international law, and the effective use of international funding mechanisms such as the Sharm El Sheikh Funding Mechanism. By examining the four case studies, valuable insights can be deduced, leading to potential strategies that can be applied across the continent to mitigate climate change-induced loss and damage. Although each country faces unique legal circumstances, overarching themes underscore the approach needed to tackle climate change loss and damage challenges effectively. Accordingly, this article proposes the following key recommendations as pathways to resilience.

The first recommendation is enhanced transboundary cooperation. The Lake Chad, Nile and Congo basin cases highlight the critical role of transboundary cooperation in managing shared resources. Countries sharing ecosystems should enhance collaboration, creating shared management bodies to plan and implement climate change adaptation and mitigation initiatives. By working together, they can better address the interconnected challenges posed by climate change and ensure sustainable resource management.

The second recommendation is the recognition and integration of local customary laws. Each case study underscored the importance of respecting and integrating customary laws and traditional practices into formal legal frameworks. Governments, particularly in Africa, should work to harmonise customary law with state and international law to ensure an inclusive, bottom-up approach to climate change policies. By acknowledging and integrating customary practices, policies can be more contextually relevant and better embraced by local communities.

Third, the article recommends the effective use of international funding mechanisms such as the Sharm El Sheikh Funding Mechanism, which provides an essential source of support for African countries combating climate change. However, its effective implementation depends on navigating the complex legal plurality and customary international law landscape. As suggested in the Lake Chad and Nile basin case studies, a multi-stakeholder dialogue platform can facilitate this process and ensure transparent and equitable distribution of funds.

In the fourth place, the article submits climate resilience and community empowerment as essential strategies. The case of Cyclone Idai emphasises the need for building local climate resilience and empowering communities to adapt to climate change. Strategies can include community-based early warning systems, sustainable agriculture practices and renewable energy programmes. Strengthening communities' capacity to respond to climate impacts enhances their ability to recover and thrive in the face of adversity.

Finally, one should not underestimate the importance of conflict resolution mechanisms. The Nile basin case illustrates that conflicts over shared resources can escalate due to climate change impacts. Establishing robust conflict resolution mechanisms based on principles of customary international law is crucial to prevent and manage such conflicts. By fostering dialogue and cooperation, disputes can be resolved peacefully, and shared resources can be managed more effectively.

In conclusion, the complexity of climate change-induced loss and damage in Africa demands a multidimensional response that recognises and navigates the intricate interplay of legal systems. The effective utilisation of international funding mechanisms, such as the Sharm El Sheikh Funding Mechanism, must be coupled with an understanding of and respect for customary international and local laws. By embracing these recommendations, African nations can work together to build resilience, protect their natural resources, and foster sustainable development in the face of climate change.