

Loss and Damage in a Landlocked State

The Paradox of Ethiopia's Green Economy

Lisa Vanhala, Selam Kidane Abebe, and Asaye Ketema

6.1 INTRODUCTION

Africa is widely known to be highly vulnerable to the impacts of climate change, and Ethiopia is often held up as a particularly extreme example of this vulnerability. The Working Group II contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), “Climate Change 2022: Impacts, Adaptation and Vulnerability,” found that climate change is reducing crop yields and productivity. For example, agricultural productivity growth has been reduced by 34 percent since 1961 due to climate change, more than any other region (Trisos et al. 2022, p. 1291).

Ethiopia is uniquely exposed to climate change risks, which vary significantly across its regions and environmental zones. At the same time, it is also seen as a paradigmatic example of a state that is – on paper at least – committed to sustainable development despite its status as a least developed country (LDC). Internationally, Ethiopia has risen to prominence in climate policymaking as a champion of a sustainable model of growth and was known throughout the 2010s for its ambition to become a “green economy front-runner” (Paul & Weinthal 2019). It has also been one of the world’s fastest-growing economies over the last decade, achieving average economic growth of 10 percent between 2005 and 2020, which has resulted in sustained improvements in the living conditions of the population. At the heart of this endeavor is Ethiopia’s Climate-Resilient Green Economy (CRGE), a development strategy launched in 2011, which mainstreams considerations of climate change across policy development and implementation across sectors.

This chapter explores several paradoxes in Ethiopia’s climate change policy. First, despite growing awareness of Ethiopia’s vulnerability to the impacts of climate change in the late 2000s, early climate policymaking was focused on mitigation strategies rather than adaptation. This is puzzling considering that

until the adoption of the Paris Agreement most developing countries consistently maintained that they have little obligation to take action on greenhouse gas emissions given the patent unfairness of developed states having industrialized without limits. Second, in many ways, landlocked Ethiopia does not fit the classic mold of a country grappling with loss and damage. Until relatively recently in the history of the UN climate change system, at the international level at least, loss and damage was seen as an issue that concerns Small Island Developing States (SIDS).

This chapter argues that the early emphasis on mitigation was driven partly by the leadership of the late Prime Minister Meles Zenawi, who became a high-profile international spokesperson on the impacts of climate change in Africa. He stood for the promise of green economic growth, and under his leadership, there was growing interest from international donor agencies, global civil society groups, and nongovernmental organizations (NGOs) within Ethiopia for the country to become a model of sustainable development (Held et al. 2013). We argue that while the country's top political leadership was motivated by a growing sense of Ethiopia's vulnerability to climate change as early as the late 2000s, there was more emphasis at that time in the international sphere on emissions abatement and economic growth. The early focus on mitigation efforts in Ethiopia was also a result of its adoption of international and regional leadership in the United Nations Framework Convention on Climate Change (UNFCCC) process. Novel policy ideas about how to achieve sustainable development along with new opportunities within and beyond the UNFCCC for tapping into international sources of climate finance (such as the Clean Development Mechanism) could facilitate domestic economic priorities (Held et al. 2013).

Now there is not only an increasing awareness of the manifold impacts of climate change in Ethiopia but also a growing policy attention to adaptation needs and efforts. While considerations of loss and damage are not explicitly mentioned in domestic climate policies, the notions of resilience and transformation are at their center. Interviews suggest that many policy stakeholders are familiar with the concept of loss and damage not only through their involvement in the UNFCCC but also through other international processes, including the United Nations Convention to Combat Desertification (UNCCD). We argue that growing policy attention on adaptation, adaptation limits, and disaster risk is a result of: (a) long-standing international engagement with the issue of climate change impacts; (b) a currently high level of attention being given to climate impacts as a result of large-scale global extreme events and the publication of IPCC reports; (c) lived experience of managing the consequences of climate change, including, for example, droughts, floods, and landslides; and (d) a growing perception of new opportunities for tapping into actual and potential international sources of climate finance that could facilitate domestic objectives around building climate resilience, addressing internal displacement, and grappling with the loss and damage already being felt in the

country across sectors, including agriculture, transport and infrastructure, and economic development.

In what follows, we discuss the effects that climatic changes are having – and likely will increasingly have – in Ethiopia. We map out relevant climate change policies in Ethiopia and outline the shift from a relatively single-minded focus on mitigating greenhouse gas emissions to an increasing emphasis on adaptation responses and overall resilience. We then show that policymakers are aware of the reputational and potential financial benefits of engaging with the issue of climate change impacts at the international level. We suggest that in contrast with the phenomenon of early domestic policymaking on climate change being driven by engagement at the international level, more recent policymaking efforts, including the growing importance of adaptation and awareness of adaptation limits, have been driven by experiences of the impacts of climate change at home. We suggest that this has shaped international engagement in the UNFCCC since Meles's early involvement at the African and then international level. At the same time, we argue that a focus on climate change impacts has achieved greater traction in recent years as the adaptation challenge and loss and damage have increased in prominence within the UNFCCC space. We also explore the role of Ethiopia in highlighting the plight of landlocked countries in the face of climate change loss and damage, thereby challenging a narrow framing of loss and damage as a SIDS issue. We then turn to domestic institutions and the ideational sphere to show that while there is increasing evidence of loss and damage and growing awareness there remain gaps in knowledge, delays in policymaking and implementation, and a lack of capacity of regional and city governments to implement the ambitious plans that have been developed, all of which are exacerbated by the lack of resources and technology to make the necessary adjustments.

6.2 NATIONAL CIRCUMSTANCES

Located in the Horn of Africa, Ethiopia is a landlocked country, and with a population of around 102 million people, it has the second-largest population on the African continent (Federal Democratic Republic of Ethiopia 2021, p. 2). Seventy-eight percent of working Ethiopians are employed in the agricultural sector, and the country maintains the largest livestock population in Africa (Federal Democratic Republic of Ethiopia 2021, p. 3). Ethiopia's reliance on rain-fed agriculture and its changing rainfall patterns mean that its economic vulnerability to climate change is high. Currently, mean rainfall levels vary around 25 percent annually, and it is estimated that yearly variation can reach up to 50 percent in certain parts of the country. Moreover, the southern region of Central Ethiopia is already grappling with 20 percent less rain (Federal Democratic Republic of Ethiopia 2021, p. 3). Although Ethiopia is known as the "water tower of Africa" due to its twelve river basins, twenty-two lakes, and extensive groundwater resources, water availability per capita could

decrease by 65 percent by 2080 (Degefu et al. 2015, p. 305; Gesellschaft für Internationale Zusammenarbeit 2019, p. 7).

At the same time, extreme weather events – including flooding and heavy rainfall – are increasing, which causes additional distress in the form of soil erosion and critical infrastructure damage (Interview 5) (see also Federal Democratic Republic of Ethiopia 2021, pp. 3–4). For example, in May 2021, around 27,400 people were displaced by flooding in the Afar Region (Davies 2021). The increasing rainfall variability also exacerbates the frequency and intensity of droughts (World Bank Group 2021, p. 6). Due to underdeveloped water resources, droughts and extensive dry periods pose particular challenges to crucial natural ecosystems and resources, which increases the potential for conflict in affected areas (World Bank Group 2021, pp. 3, 11, see also Interview 3). Rural parts of Ethiopia, where almost 80 percent of the population lives, are particularly vulnerable to climate-related impacts (Federal Democratic Republic of Ethiopia 2021, p. 3; Gezie 2019, p. 7). This is largely because these pastoral, agropastoral, and smallholder farming communities heavily depend on a stable climate for rain-fed agricultural subsistence (Gezie 2019, pp. 13–14; see also Feliciano et al. 2022). For decades, the population of the Ethiopian highlands has been affected by increasing food insecurity stemming from high population growth, deforestation, and ill-suited methods of agricultural production and productivity.

Most research participants mentioned land degradation when listing the types of climate change-related issues that the country faces, and one noted that “unless we restore those priority areas within ten or twenty, fifty years there will be an adverse effect of land degradation in terms of physical land degradation, biological and chemical land degradation” (Interview 3). The interviewee added that the decrease in productivity “will really hasten the migration of people from degraded areas,” which is also captured in the government’s policy documents that explore population movements and displacement from extreme as well as slow onset events (Interviews 3, 7) (see also Federal Democratic Republic of Ethiopia 2021, p. 4). Rising mean temperatures further increase the prevalence of climate-sensitive diseases, including increasing occurrences of malaria and dengue fever in human communities. Interviewees also mentioned the growing prevalence of and changes in disease among livestock and growing concern about the impact of certain types of insects, such as locusts, in the agricultural sector (Interview 2 and see also World Bank Group 2021, p. 20). In the early 2010s, the Ethiopian government estimated that climate change was already resulting in economic losses equivalent to 2–6 percent of gross domestic product each year (Federal Democratic Republic of Ethiopia 2010). The cumulative economic-wide impact of future climatic changes is predicted to be severe. Noneconomic losses to the cultural heritage and ways of life of people could also become a major concern if the movement of people continues to be instigated by the impacts of climate change.

6.3 POLICY LANDSCAPE

Despite growing scientific understanding of climate risks and the urgent need for adaptation, Ethiopia's development and coordination of climate change policy at both the domestic and international levels were fairly limited until 2009. The Council of Ministers (the cabinet of the Ethiopian government) recognized the need for an effective response to global warming as early as 1997 – for example, the environmental policy of Ethiopia adopted that year included policy recommendations related to climate change – but in line with the policies of most developing countries, the issue was not prioritized (Held et al. 2013). Goals of creating a climate monitoring program and taking action on climate change were vaguely defined and relatively underdeveloped, with the exception of several projects and programs supported by international public and private donor agencies or domestic civil society organizations (Held et al. 2013). However, as awareness of climate change and its impacts grew in the late 2000s, the Ethiopian government began to develop a more proactive and strategic response.

Since then, Ethiopia has been at the forefront of embedding climate-related objectives into the country's model of development. Complementing its rise as a climate change policy leader internationally (discussed later), the Ethiopian government had made climate change a domestic priority by 2010 (Paul & Weinthal 2019). In the five-year Growth and Transformation Plan of 2010, the government set the ambitious objective of Ethiopia achieving net zero emissions by 2025 (Federal Democratic Republic of Ethiopia 2010). With the support of the Global Green Growth Initiative (GGGI), an intergovernmental organization with ties to private industry based in South Korea, Ethiopia embarked on ambitious structural transformation through the launch in 2011 of its CRGE initiative. It was the first country in Africa to try to implement such an initiative, which involves boosting agricultural productivity, strengthening the industrial base, and fostering export growth all in a sustainable fashion.

The CRGE has two components: the Green Economy Strategy, published in 2011, which focuses on mitigation through green economic development, and the Climate Resilient Strategy, which focuses on tools for adaptation and building climate resilience through the Ethiopian Programme of Adaptation to Climate Change (Kaur 2013; Paul & Weinthal 2019). Specific objectives related to mitigation goals include reducing agricultural emissions, protecting and expanding forests, expanding renewable electricity generation, and adopting energy-efficient technologies in transport, industry, and the built environment. A new CRGE facility was also established to attract funding. The CRGE was mainstreamed into the Second Growth and Transformation Plan (GTPII), which covered the 2016–2020 period.

A new ten-year development plan was released in 2020 for the period 2021–2030, and the process of its development was aligned with the process for updating Ethiopia's Nationally Determined Contribution (NDC). While

undertaking both processes in parallel created an additional administrative burden, it offered an opportunity to mainstream climate change considerations into the country's development objectives (Belay et al. 2021). Ethiopia submitted an update to its enhanced NDC in July 2021 (Federal Democratic Republic of Ethiopia 2021). One research participant that has been involved in the international negotiations noted that there is growing awareness domestically that “the climate changes, and unless we take the necessary measures we may not survive” (Interview 2). He suggested that awareness was growing and that “everybody will know how much climate change has an impact on the economy, on the social, on the environment ... it will even include the politics issue in the future” (Interview 2).

Until the mid 2010s, the adaptation stream could be seen as the poor cousin of mitigation policies and sustainable development objectives. For example, in the foreword to the CRGE document there is an explicit note stating “[t]he document does not cover climate resilience, which will be added over the coming months,” but it was only in 2014 that the first part of the Climate Resilient Strategy, on agriculture, was completed (Federal Democratic Republic of Ethiopia 2011, p. iii; Paul & Weinthal 2019). The majority of national and international programming efforts focused on the agricultural sector, including pastoralism, as well as disaster risk management and capacity-building for government officials and civil society.

By the mid 2010s, there were still key gaps in adaptation action (Echeverría & Terton 2016). However, in 2019 Ethiopia launched a fifteen-year National Adaptation Plan (NAP), taking a sectoral approach to adaptation and focusing on the agriculture, forestry, health, transport, power, industry, water, and urban sectors (Federal Democratic Republic of Ethiopia 2020). Developed in accordance with the Cancun Adaptation Framework of 2010, the aim of the NAP is to mainstream adaptation into the national development plans, in particular the GTPII (Belay et al. 2021). It includes five strategic priorities: (a) mainstreaming climate change adaptation into development policies, plans, and strategies; (b) building long-term capacities of institutional structures involved in adaptation; (c) implementing effective and sustainable funding mechanisms; (d) advancing adaptation research and development in the area of climate change adaptation; and (e) improving the knowledge management system for the NAP (Federal Democratic Republic of Ethiopia 2019). According to the document, the estimated cost of implementing the NAP over the fifteen-year period is approximately USD 6 billion per year (Federal Democratic Republic of Ethiopia 2019, p. iv).

On a policy level, Ethiopia is seen as a leader among low-income countries, particularly on the mitigation side but also more recently on adaptation (Belay et al. 2021). However, interviews with stakeholders and existing research have suggested there is an implementation gap. One interviewee described the financial restrictions on putting policy into practice: “The main challenge now in the first place is a finance issue because, as you know,

Ethiopia is one of the countries that has good environmental and climate change policies and regulations. But putting that into practice requires quite huge amounts of money” (Interview 6). Other research has noted that the reach of the Ethiopian state to implement programs across the country, particularly into rural areas, remains limited (Paul & Weinthal 2019). Some scholars have taken an even more critical stance. In an early critique of the environmental policy of Ethiopia, Ruffeis et al. (2010) argue that the policy in the 2000s was driven by donors rather than a genuine commitment from the government. They suggested that (at that moment at least) there were irreconcilable tensions between development policies and environmental priorities (see also the debate between Keeley and Scoones [2000] and Nyssen et al. [2004]). More recently, a Climate Action Tracker report observed that “[w]hile there is continuity of climate efforts across administrations, there is not the same commitment to ambitious action as when Ethiopia took early action and adopted its ten-year climate strategy years ahead of the Paris Agreement” (Climate Action Tracker 2020).

A final barrier to advancing climate policy domestically is conflict. The recent internal instability in Ethiopia has meant, as one research participant noted, that more immediately pressing concerns over conflict have resulted in climate policymaking being seen as less urgent: “The government now is really busy with other issues, very burning and critical national issues,” which means that “environmental issues might be overlooked” (Interview 6).

6.4 INTERNATIONAL ENGAGEMENT

The late Prime Minister Meles became an international spokesperson on the impacts of climate change in Africa in the 2000s. The twelfth Conference of the Parties (COP12) of the UNFCCC, held in Nairobi, Kenya, represented a critical juncture for engagement with climate change policy in Africa (Paul & Weinthal 2019; Ramos & Kahla 2009). In 2009, the African Union took a common position on climate policy including acceding to the UNFCCC and the Kyoto Protocol. Prime Minister Meles was then nominated to the inaugural chair of the Conference of African Heads of State and Government on Climate Change, which moved the issue of climate change up the policy agenda in Ethiopia (Held et al. 2013). He played an even more pronounced role at COP15 in Copenhagen, highlighting the issue of African nations’ need for climate change adaptation finance and support, and played a notable role in negotiating the objective of developed states providing USD 100 billion in climate finance by 2020 (Vidal 2009).

Previous research has suggested that the Meles government’s position on domestic climate policy was heavily shaped by international influences, including those described earlier (Held et al. 2013; Paul & Weinthal 2019). Another factor that has been identified was the Ethiopian government’s engagement the GGGI, which played an important role in shaping the CRGE. The GGGI

had begun to partner with governments in order to help with the development of low-carbon growth strategies and projects, as well as implementation and capacity-building. Ethiopia was seen to have numerous opportunities to reduce emissions while maintaining high levels of growth: Having invested heavily in hydropower, it could expand its ability to provide clean energy for the region; transportation infrastructure could be upgraded to reduce emissions; and agricultural practices could be cultivated in such a way as to advance sustainability objectives. This set of new ideas about green growth aligned with a domestic agenda focused on economic development as well as with a growing awareness that the donor community was interested in sustainable development. Moving first among low-income states was seen as a way of helping attract investors and donors to the various initiatives resulting from the CRGE.

International influence also shaped early planning on adaptation. Ethiopia developed its National Adaptation Programme of Action (NAPA) and its Climate Change Technology Needs Assessment Report, released in June 2007, with financial and technical assistance from the Global Environment Facility and the United Nations Development Programme (UNDP). Held et al. (2013, p. 224) argue that “it is doubtful whether the documents would have been undertaken without this support.” The NAPA provided a comprehensive assessment of the country’s vulnerability and the kinds of measures needed to adapt successfully. Another research participant suggested that engagement with the UNCCD has also shaped understandings of climate impacts and methods for establishing indicators of land degradation, collecting data, and reporting (Interview 3).

Meles’s passing in 2012 did not put an end to Ethiopia’s international engagement; if anything, Ethiopia has become even more active over the past decade. Negotiations on how to address climate impact gained more prominence from the mid 2010s onward in the UNFCCC and other ministerial-level convenings, globally and regionally. Ethiopia, as part of the LDC Group on Climate Change, African Group of Negotiators on Climate Change (AGN), and G77 & China, plays a leading role in the negotiations under the UNFCCC. For a two-year period, from 2017 to the end of 2018, Ethiopia served as the chair of the LDC Group for the climate negotiations. During this period, it called for scaled-up climate financing to address the adverse impacts of climate change, ambitious mitigation efforts by developed countries to avert climate change, and a devoted political space both under the COP and the Paris Agreement governing body.

During the negotiations at COP23, Ethiopia, on behalf of the LDCs, stressed the importance of exploring options to mobilize and enhance support for addressing loss and damage. COP23 in decision 5/CP.23 paragraph 9 concluded by establishing the “Suva expert dialogue,” which aimed to consider a range of information and views in order to mobilize and secure expertise and build finance, technology, and capacity for addressing loss and damage. In 2018, following the discussion of the Suva expert

dialogue, Ethiopia on behalf of the LDCs called for a permanent technical and political space under the UNFCCC Financial Mechanism for addressing loss and damage.

Since the adoption of the Paris Agreement, Ethiopia has also led the negotiations on Article 6 on behalf of the LDCs. Article 6 discussions, particularly on the share of proceeds from international carbon markets, are an important source of financing for adaptation projects. Ethiopia also represents the LDC Group in negotiations on the global stocktake, assessing the progress made toward achieving all the goals of the Paris Agreement. Furthermore, Ethiopia continues to be among leaders on mitigation ambition with ministerial-level leadership, including the Climate and Development Ministerial, which contributed to the success of COP26 at Glasgow.

Countries adopted the Glasgow Climate Pact in decision 1/CMA.3 at COP26. Paragraph 78 of the decision established the Glasgow Dialogue on Loss and Damage. It was considered a game changer at the time, as it created some space for discussing financial arrangements for loss and damage. However, the discussions at the first Glasgow Dialogue during the fifty-sixth session of the Subsidiary Bodies under the UNFCCC were stalled with no clear path forward on how to address the impasse. This stalemate resulted in developing countries – led by the G77, with support from the subgroups LDCs, SIDS, and AGN – to submit a request for a formal agenda item on financial arrangements for loss and damage at COP27. This request was granted, and the establishment of a loss and damage fund was heralded as a major victory in Sharm El Sheikh. Ethiopia contributed to both the request and the ensuing discussion, drawing attention to regional concerns of loss and damage such as noneconomic losses, droughts, and associated food security risks.

In line with previous research, we find a growing perception of two types of opportunities associated with international engagement. The first is related to reputation. Several interviewees noted that Ethiopia is known internationally for having good policies and regulations and buy-in across senior leadership, and they saw this as advantageous for the country not only internationally but also at the African level (Interview 6). As one interviewee noted, “It can gain us attention from the world’s nations” (Interview 5). The second concerns resources. Several research participants noted that paying attention to climate risks and loss and damage can help Ethiopia tap into international sources of climate finance that can support the implementation of policies and facilitate other economic objectives related to building resilience (Held et al. 2013; see also Interviews 5, 6, 7). For example, one research participant involved in the UNFCCC negotiations noted that “it is known that there are various sources at the national and international level. So, this source of finance is one of the opportunities that we have, if we are able to use it properly” (Interview 2). However, there was also an awareness of the limitations of international climate finance. One of the research

participants suggested that international financial resources are “not sustainable and dependable” and that developed countries are “cutting a lot of their aid, which is politicized” (Interview 6).

6.5 INSTITUTIONS

Awareness of the problem of climate change has increased among officials from nearly all ministries and levels of government as well as across international organizations based in Addis Ababa (Interview 2). As Held et al. (2013, p. 218) note, “Climate change once used to warrant little to no mention by officials outside the country’s main UNFCCC and Clean Development Mechanism (CDM) focal points. Adaptation and mitigation policies and programmes were underdeveloped, at best.”

Paralleling growing engagement at the international level, Ethiopia began to take a cross-ministerial approach in 2010 in order to have oversight of the development of its official climate change strategy. A Ministerial Steering Committee was composed of ministers from what was then the Ministry of Finance and Economic Development (MoFED), the Ministry of Agriculture and Rural Development, the Ministry of Water, Irrigation and Energy (MoWIE), the Ministry of Trade and Industry, and the Ministry of Transport and Communication (MoTAC) and the heads of the Environmental Protection Agency and the National Meteorology Agency. As an initiative with its genesis from within the Prime Minister’s Office, the Ministerial Steering Committee was notable for its high political status and for its ability to stimulate climate change awareness and planning in all the major ministries. It suffered, however, from the fact that many ministries did not yet have the expertise and/or capacity that were required to engage with the issue and identify sector-specific needs, and it was also criticized by local civil society groups for excluding them from the policymaking process (Held et al. 2013).

The Ministerial Committee oversaw the development of Ethiopia’s CRGE strategy, and the MoFED, together with the Environment, Forest and Climate Change Commission (EFCCC), has a strong reputation in delivering on climate change projects (Climate Action Tracker 2020). Our interviewees from across ministries showed a high level of awareness of climate impacts. For example, an interviewee from MoTAC noted that while the primary concern of the ministry is reducing greenhouse gas emissions in the transport sector it also had two secondary concerns: building climate-resilient infrastructure and preventing the adverse impact of infrastructure development on society and the environment. The participant noted that weather can have multiple potential impacts on transport. For example, landslides could result in both a disruption to transport service schedules and damage to infrastructure (Interview 5).

A number of challenges at the institutional level were also seen to shape the development and responses to climate change impacts. The first concerned questions of capacity in terms of finance and technology. One interviewee noted that when it came to addressing loss and damage “everything is relying on finance.” They then added that particularly when addressing loss and damage technology would be critical. The interviewee pointed to early warning systems in particular to provide information to protect vulnerable groups (Interview 2). This was echoed by interviews with research participants from across ministries (Interviews 5, 7, 8). A related issue that was highlighted in interviews concerned capacity to develop projects and programs related to climate change impacts that would then be supported by donors (both public and private). One research participant working on land degradation said, “We need to develop very good bankable projects that attract financial sources either from the multilateral or bilateral agreements for instance. For that you need capacity” (Interview 3).

A second set of challenges concerned levels of coordination between central government and other levels of government (Interviews 2, 4, 7). One interviewee noted that different sectors place differing levels of weight on climate change as a concern: “From the federal level down to the lower level, the focus, or the attention, or the emphasis given to climate change is not equal in all sectors. So, convincing and persuading these different bodies is also another challenge ... and unless higher level leaders give emphasis or attention to this issue it cannot be implemented, especially the higher leaders” (Interview 2). Another interviewee noted that at the city level many of the issues related to loss and damage may be dealt with by those on the operations side: “Practically we may be addressing the loss and damage issues, but not in the context of climate change” (Interview 4).

Third, several interviewees mentioned the need to bring a wider array of actors, including the private sector, regional state and city authorities, and affected communities together in thinking about the governance of responses to climate change impacts (Interviews 2, 6). One noted the important role of NGOs and development partners that are involved in land restoration activities in Ethiopia such as the UNDP, the Food and Agriculture Organization, and local NGOs (Interview 3). Another suggested that there should be a clearer sense of the contribution of the private sector, as well as academic, humanitarian, development, and peace actors to the loss and damage conversation (Interview 9). Recent changes in the civil society landscape with the Civil Society Proclamation in 2019 also suggested the potential widening of the civic space which might shape possibilities for domestic civil society organizations to influence the development and implementation of policies related to loss and damage and managing climate risk in the future. Other institutions within government that address the impacts of disasters and aftermaths of emergency situations could also

be useful. In Ethiopia, disaster risk readiness and response mechanisms do try to address the impacts of events such as droughts that are regular occurrences. However, coordination among actors in climate loss and damage and humanitarian assistance and disasters preparedness is still limited.

6.6 IDEAS

The most significant ways in which ideas were seen as relevant to policy development on loss and damage were related to the availability of data and expertise. This concerned both methodologies and research to assess and map vulnerability, particularly in the areas most susceptible to climate impacts. One research participant noted that there was a need for developing a greater understanding of potential solutions to issues related to loss and damage, particularly of solutions that would “facilitate the engagement of the private sector” (Interview 2). Several interviewees suggested the importance of identifying existing indigenous knowledge and gathering community-level data. One research participant from the MoWIE said, “I think it is better to have first-hand data. ... Visiting the community and knowing you can find true information there. You can get the real data there” (Interview 8). Another suggested that vulnerability assessments should be undertaken at the local and/or community level because “the highland area and the lowland area may not have the same vulnerability” (Interview 2).

In our conversations there was a sense that the EFCCC would be able to conduct this research if provided with resources to do so. A research participant working on drought noted that collaboration between the EFCCC and the UNCCD had been effective in supporting the development of national drought plans which had involved assessing historic data on climate change and relying on scenario analysis (Interview 3). The interviewee suggested that working with national universities and understanding the economics of land degradation were useful in being able to communicate the value of land restoration in monetary terms: “That kind of research is very interesting for us in order to get real attention from policy or decision-makers in the future” (Interview 3). Another noted that climate policy is often being developed using international research outputs and internationally led inputs but that this can result in a “disconnect between the policy and the science” and that “there is the capacity to develop proper scientific data for policymakers within our country” (Interview 4). One interviewee suggested that it would be useful to develop a national database “where one can easily access and use the different researches [research outputs] carried out by different stakeholders so far. Because most assessments are done as beautiful outputs, then they end up on a shelf covered with dust” (Interview 6).

A research participant noted that data from other Sub-Saharan countries can be useful for triangulating information during policy and strategy development to compare where Ethiopia stands. CRGE strategy implementation and

the budget allocation of developing countries toward climate change-related work, the interviewee noted, can be “very important to convince policymakers” (Interview 2). Furthermore, improvement in the knowledge outputs and data could enhance Ethiopia’s contribution to group positions and negotiation of key decisions on newer areas of discussions that require data from a variety of countries. The benefit the country will draw from international cooperation in terms of capacity development, technology transfer, and financial support will be dependent on how it can assess and present its needs and gaps.

6.7 CONCLUSION

Table 6.1 synthesizes the main results from our analysis along the four dimensions of the analytical framework we developed in Chapter 2. The findings in this chapter suggests that while SIDS have led the charge at the international level on raising the issue of climate change loss and damage – which originally tended to be framed around the impacts of sea-level rise and the threat of coastal erosion – there has been growing awareness among policy stakeholders in landlocked states and LDCs of the consequences of climate change. Although considerations of loss and damage are not explicitly mentioned in domestic climate policies, recent engagement with developing adaptation policies suggests that a new stage of climate policymaking, which grapples more explicitly with climate change loss and damage in Ethiopia, may be on the horizon. This shift can be contextualized within the broader evolution of climate policy in Ethiopia.

Ethiopia’s growing policy attention on adaptation, adaptation limits, and disaster risk is a result of long-standing international engagement with the issue of climate change impacts, lived experience of managing the consequences of climate change, and a growing perception of new opportunities for tapping into actual and potential international sources of climate finance that could facilitate domestic objectives around capacity-building and/or using new technologies to build climate resilience, address internal displacement, and grapple with the myriad losses and damages already being felt in the country across sectors including agriculture, transport and infrastructure, and economic development.

Important challenges and questions remain. Although climate change policy has been a priority in Ethiopia for more than a decade now, the country’s approach to climate governance is in many ways a half-filled promise, with delays and gaps in implementation and questions about how far-reaching the central state’s policies are, particularly into rural and conflict-ridden regions. It is worth noting that the rate of economic growth has dropped significantly as a result of the COVID-19 pandemic and of internal violent conflict in the northern regions of Tigray, Afar, and Amhara. The country’s leadership has other urgent issues that it is grappling with, meaning that less attention is being directed toward climate policymaking.

TABLE 6.1 *Summary of Ethiopia*

Key climate change hazards, risks, and impacts	Key policies in adjacent policy domains	International influences	Institutional insights	Ideas
<ul style="list-style-type: none"> • Changing rainfall patterns, heavy rainfall • Flooding • Soil erosion • Droughts and extensive dry periods • Climate-sensitive diseases 	<ul style="list-style-type: none"> • Environmental policy (1997) • 5-year Growth and Transformation Plan (2010) • New development plans in 2016 and 2020 • CRGE development strategy (2011) <ul style="list-style-type: none"> ◦ Green Economy Strategy ◦ Climate Resilient Strategy • Loss and damage not explicitly mentioned in policies but notions of resilience and transformation are front and center • Civil Society • Proclamation (2019) • NAP (2019) • First NDC (2021) 	<ul style="list-style-type: none"> • UNFCCC • UNCCD • GGGI • Mention of GEF and UNDP (financial and technical assistance) • Food and Agriculture Organization and local NGOs 	<ul style="list-style-type: none"> • Awareness of the problem of climate change has increased among officials from nearly all ministries and levels of government as well as across international organizations based in Addis Ababa • Cross-ministerial approach in 2010 in order to have oversight of the development of Ethiopia's official climate change strategy • Problems with limited financial and technical capacities to adequately address loss and damage issues • Early climate policies focused on mitigation rather than adaptation • Growing policy attention to adaptation needs and efforts and increasing awareness of the manifold impacts of climate change in Ethiopia • Growing policy attention on adaptation, adaptation limits, and disaster risk is a result of 	<ul style="list-style-type: none"> • Many policy stakeholders are familiar with loss and damage concept through engagement at the UN level • A shift from a relatively single-minded focus on mitigating greenhouse gas emissions as the economy grows to an increasing emphasis on adaptation responses • Policymakers are aware of the reputational and potential financial benefits of engaging with the issue of climate change impacts at the international level • In contrast to early domestic policymaking on climate change being driven by engagement at the international level, more recent policymaking efforts, including the growing importance of adaptation and awareness of adaptation limits, are driven by growing awareness and experiences of the impacts of climate change at home

- now long-standing international engagement with climate change impacts
- lived experience of managing consequences of climate change, including, e.g., droughts, floods, and landslides
- growing perception of potential new opportunities for tapping into actual and potential new international sources of climate finance that could facilitate domestic objectives around building climate resilience, addressing internal displacement, and grappling with the myriad losses and damages already being felt in the country across sectors, including agriculture, transport and infrastructure, and economic development
- Implementation gaps, especially in rural areas
- Need for a bigger role of more stakeholders, e.g., private sector, regional state and city authorities, affected communities, and NGOs
- Role of Ethiopia in highlighting the plight of landlocked countries in the face of climate change loss and damage thereby challenging a narrow framing of loss and damage as a SIDS issue in that arena
- Need for more research, data, and expertise on loss and damage, especially local and indigenous knowledge
- Need for better understanding of potential solutions to issues related to loss and damage
- Data from other Sub-Saharan countries can be useful for triangulating information during policy and strategy development to compare where Ethiopia stands

REFERENCES

- Belay, A. D., Elliott, C., & Hedeto, M. G. (2021). Ethiopia's updated NDC underscores its focus on climate action. World Resources Institute. Retrieved from www.wri.org/insights/ethiopia-updated-ndc-climate-action
- Climate Action Tracker. (2020). CAT Climate Governance Series – Ethiopia – December 2020, Climate Analytics; NewClimate Institute. Retrieved from https://climateactiontracker.org/documents/838/2020_12_CAT_Governance_Report_Ethiopia.pdf
- Davies, R. (2021). Ethiopia: Thousands displaced by floods in Afar, SNNP and Somali Regions. FloodList. Retrieved from <https://floodlist.com/africa/ethiopia-floods-afar-snnp-somali-may-2021>
- Degefu, D. M., He, W., & Zhao, J. H. (2015). Hydropower for sustainable water and energy development in Ethiopia. *Sustainable Water Resources Management*, 1(4), 305–314.
- Echeverría, D., & Terton, A. (2016). Review of Current and Planned Adaptation Action in Ethiopia (CARIAA Working Paper #8). Ottawa, Canada, and London: International Development Research Centre and UK Aid. Retrieved from www.iisd.org/system/files/publications/idl-55864-ethiopia.pdf
- Federal Democratic Republic of Ethiopia. (2010). Growth and Transformation Plan 2010/11–2014/15, Vol. Volume I: Main Text. Addis Ababa: Ministry of Finance and Economic Development. Retrieved from <https://extranet.who.int/mindbank/item/5757>
- Federal Democratic Republic of Ethiopia. (2011). *Ethiopia's Climate-Resilient Green Economy: Green Economic Strategy*. Addis Ababa: Federal Democratic Republic of Ethiopia. Retrieved from www.preventionweb.net/files/61504_ethiopiarcge.pdf
- Federal Democratic Republic of Ethiopia. (2019). *Ethiopia's Climate Resilient Green Economy: National Adaptation Plan*. Addis Ababa: Federal Democratic Republic of Ethiopia. Retrieved from www4.unfccc.int/sites/NAPC/Documents/Parties/NAP-ETH%20FINAL%20VERSION%20%20Mar%202019.pdf
- Federal Democratic Republic of Ethiopia. (2020). *Ethiopia's Climate Resilient Green Economy: National Adaptation Plan (NAP) Implementation Roadmap*. Addis Ababa: Environment, Forest and Climate Change Commission, Federal Democratic Republic of Ethiopia. Retrieved from <https://napglobalnetwork.org/wp-content/uploads/2020/08/napgn-en-2020-Ethiopia-climate-resilient-green-economy-nap-roadmap.pdf>
- Federal Democratic Republic of Ethiopia. (2021). *Updated Nationally Determined Contribution*. Addis Ababa: Federal Democratic Republic of Ethiopia. Retrieved from https://unfccc.int/sites/default/files/NDC/2022-06/Ethiopia%27s%20updated%20NDC%20JULY%202021%20Submission_.pdf
- Feliciano, D., Recha, J., Ambaw, G., MacSween, K., Solomon, D., & Wollenberg, E. (2022). Assessment of agricultural emissions, climate change mitigation and adaptation practices in Ethiopia. *Climate Policy*, 22(4), 427–444.
- Gesellschaft für Internationale Zusammenarbeit. (2019). Climate risk profile: Ethiopia. Deutsche Gesellschaft für Internationale Zusammenarbeit on behalf of German Federal Ministry for Economic Cooperation and Development. Retrieved from www.pik-potsdam.de/en/institute/departments/climate-resilience/projects/project-pages/agrica/climate-risk-profile_ethiopia_en

- Gezie, M. (2019). Farmer's response to climate change and variability in Ethiopia: A review. *Cogent Food & Agriculture*, 5(1), 1613770, 1–13.
- Held, D., Roger, C. B., & Nag, E.-M. (2013). Ethiopia's path to a climate-resilient green economy. In D. Held, C. B. Roger, & E.-M. Nag, eds., *Climate Governance in the Developing World*, Cambridge: Polity, pp. 218–237.
- Kaur, N. (2013). Ethiopia: Can it adapt to climate change and build a green economy? International Institute for Environment and Development. Retrieved from www.iied.org/ethiopia-can-it-adapt-climate-change-build-green-economy
- Keeley, J., & Scoones, I. (2000). Knowledge, power and politics: The environmental policy-making process in Ethiopia. *The Journal of Modern African Studies*, 38(1), 89–120.
- Nyssen, J., Haile, M., Moeyersons, J., Poesen, J., & Deckers, J. (2004). Environmental policy in Ethiopia: A rejoinder to Keeley and Scoones. *The Journal of Modern African Studies*, 42(1), 137–147.
- Paul, C. J., & Weinthal, E. (2019). The development of Ethiopia's climate resilient green economy 2011–2014: Implications for rural adaptation. *Climate and Development*, 11(3), 193–202.
- Ramos, M., & Kahla, V. (2009). Climate change: Opportunities for Africa. *Global Journal of Emerging Market Economies*, 1(2), 259–271.
- Ruffeis, D., Loiskandl, W., Awulachew, S. B., & Boelee, E. (2010). Evaluation of the environmental policy and impact assessment process in Ethiopia. *Impact Assessment and Project Appraisal*, 28(1), 29–40.
- Trisos, C. H., Adelekan, I. O., Totin, E., ... Zakieldean, S. (2022). Africa. In H.-O. Pörtner, D. C. Roberts, M. Tignor, ... B. Rama, eds., *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, UK and New York: Cambridge University Press, pp. 1285–1455.
- Vidal, J. (2009). Copenhagen: Head of African bloc calls on poorer nations to compromise over climate funding. *The Guardian*. Retrieved from www.theguardian.com/environment/2009/dec/16/meles-zenawi-copenhagen-climate-funding
- World Bank Group. (2021). Climate risk profile: Ethiopia. World Bank Publications. Retrieved from https://climateknowledgeportal.worldbank.org/sites/default/files/2021-05/15463A-WB_Ethiopia%20Country%20Profile-WEB.pdf