9

(Non)Governance Evolving

COP25 and Chile's Growing Engagement with Loss and Damage

Monserrat Madariaga Gómez de Cuenca

9.1 INTRODUCTION

Despite its high vulnerability to the impacts of climate change, Chile does not have any specific or explicit policy measures in place to target climate change loss and damage. Historically, the Chilean government has been relatively distant from discussions happening at the international level. Before the twenty-fifth Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) in 2019, when Chile took on the role of COP presidency, the country had not directly participated in loss and damage negotiations. Instead, it had been represented by or coordinated with the Independent Association of Latin America and the Caribbean (Asociación Independiente de Latinoamérica y el Caribe, known as AILAC), which brings together many of the Latin American free market economy countries in one negotiating group.

The Chilean COP25 presidency, as well as the growing importance of loss and damage in the UNFCCC negotiations since then, has resulted in Chile becoming much more invested in the issue of loss and damage. In the last few years, Chile has been one of the main promotors of the Santiago Network on Loss and Damage (SNLD), set up to catalyze technical assistance for the implementation of relevant approaches for adverting, minimizing, and addressing loss and damage at the local, national, and regional levels (UNFCCC 2019). This catalyzing engagement with loss and damage was influential in the appointment of Chilean Minister of the Environment Maisa Rojas as the co-chair for the loss and damage negotiations at COP27 in Sharm El Sheikh in 2022. Yet despite this active international engagement, loss and damage policymaking at the national level remains limited.

By reviewing the domestic policy landscape and institutional responses to loss and damage, together with fourteen interviews with key government,

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

non-governmental organization (NGO) and private sector personnel, this chapter seeks to explain why Chile's new emphasis on loss and damage on the international stage has not yet fully infused national governance, identifying main barriers to prioritizing loss and damage at the national level. Although limited, there is some emerging recognition of and engagement with the issue at the national level: For example, there are three commitments related to "losses and damages" within the adaptation pillar of Chile's Nationally Determined Contribution (NDC), as well as a growing awareness of the country's vulnerabilities and the need to address loss and damage across different sectors of society. Furthermore, this chapter shows that while international negotiations act as a driver for domestic climate governance in some cases, Chile's centralism, lack of ministerial coordination, and the relatively institutionally weak position of the Ministry of the Environment (Ministerio del Medio Ambiente, MMA) all operate as barriers to the development of more effective governance responses to loss and damage. Another key reason behind Chile's limited engagement with loss and damage is its economy: the country's status as a high-income emerging economy and its prioritization of mining, agriculture, and industry over the environment – as is often the case with extractive economies. Finally, using the example of Chile's privatization of its scarce water resources, this chapter suggests that a neoliberal regime can act as a significant obstacle to addressing climate-related loss and damage.

9.2 NATIONAL CIRCUMSTANCES

Chile is formed of continental land and insular territories (islands and archipelagos). Its continental land occupies a long and narrow strip in South America, bounded by the Andes and Argentina to the east and more than 6,000 kilometers of coast on the Pacific Ocean to the west. Chile also has jurisdiction over Easter Island, located in Oceania. This diverse geography results in varied climatic zones across the country: from the Atacama Desert in the north of Chile – the driest in the world – to Patagonia in the south, where the ice fields concentrate the largest glacierized area in South America (Pellicciotti et al. 2014, p. 1199).

Given its varied geography, Chile is already experiencing wide-ranging climate impacts, particularly increases in temperatures and nationwide heatwaves (Jarpa Solar 2020). This will be felt with greater intensity in the northern area (1.5 to 2 degrees Celsius above the historical average) and in the mountainous region of the Andes due to rainfall reduction and drought (Jarpa Solar 2020). Chile has been experiencing a ten-year megadrought, which has contributed to its problem with water scarcity (see Section 9.6), and rainfall is expected to decrease by up to 30 percent in the future (Bustos et al. 2015). These changes also pose threats to some of the main economic activities of the country – agriculture and forestry – as well as to people's lives and livelihoods. Newspaper headlines have identified climate change-related migration associated with

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

water scarcity in various parts of Chile (Benfeld 2022; Montes 2021). The mining sector has begun to resort to desalinization processes to meet water needs (Interview 14). Other climate-related challenges include rising tides in coastal areas; extreme climate events in different parts of the country, such as floods, landslides, and the intensification of forest fires; sea swells; reduction of glaciers; ocean acidification; and damage to infrastructure (Government of Chile 2020a).

The Chilean government recognizes these vulnerabilities in its national communications to the UNFCCC and most national climate policy instruments. They outline how Chile meets seven out of the nine criteria for climate vulnerability under the UNFCCC regime: low coastal areas; arid and semi-arid regions; forested regions; land susceptible to natural disasters; drought and desertification; urban areas with atmospheric contamination; and mountain ecosystems (Government of Chile 2020a, p. 10). The same communications and scientific documents point to structural inequalities, institutional weaknesses, and the extractivist-focused development model as stressors of these circumstances.

9.3 POLICY LANDSCAPE

Chile's presidency of COP25 in 2019 was seen as a pivotal moment to strengthen the country's national climate policy framework. Since then, several new climate policy instruments have been developed. First, the Framework Law on Climate Change (Ley Marco de Cambio Climático, referred to here as LMCC), adopted in June 2022, sets out new policy instruments, including the 2050 long-term climate strategy (*Estrategia climática de largo plazo*) (Government of Chile 2022a). The strategy lays out a road map for mitigation and adaptation, establishing 2050 as a deadline for carbon neutrality and setting out adaptation guidelines and thresholds. The LMCC establishes other policy instruments, namely, sectoral mitigation and adaptation plans. The Chilean NDC complements these documents and is unusual among Latin American and developing countries' NDCs in that it explicitly aims for carbon neutrality by 2050. This emphasis on mitigation was criticized by some actors who believe the government, given the country's already relatively low greenhouse gas emissions, should focus efforts on adaptation to attend to the country's most urgent needs and think through potential future climate scenarios (Interviews 2, 9). For other actors, the 2050 mitigation goal, as a result of matching the international framing, is not ambitious enough as it does not consider the urgent need to decarbonize some specific areas, particularly the "sacrifice zones" (Interview 2). The idea of sacrifice zones first emerged from affected communities and the NGO sector but was then crystallized through case law in Chile. It concerns those territories that endure irreversible and severe environmental damage due to the economic activities being performed there. A paradigmatic example is the Quintero and Puchuncaví region, also

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

referred to as "the Chilean Chernobyl" in international media, that has been affected for decades by recurrent oil spills in the sea, toxic gas emissions from the local thermoelectric plant, and other air, water, and land pollution from mining and other industrial activities (Dannemann 2022; Leija 2022). A 2019 Supreme Court ruling grants protection to the population and determines state responsibility:

> The several failures to act committed by the bodies of the Executive Branch, these are the Ministry of the Environment and the Ministry of Health, constitute serious illegal omissions that, at the same time, have violated the rights invoked by the plaintiffs and which are guaranteed by the Constitution. (Labbé Céspedes & Palma Calorio 2019)

Pressure to act and the election of a more progressive and "green" government in 2021 prompted the board of one of the companies operating in the area – a state-owned smelting factory, Codelco Ventanas – to announce the closure of its operation (Deutsche Welle 2022).

The adaptation section of the 2020 NDC includes a specific loss and damage-related commitment: "by 2021, an estimation of the costs of inaction on climate change, and by 2025 following the same line, an estimation of costs associated with historic losses and damages."[1] According to stakeholders, especially within government, this instrument is considered a key priority as these costing estimations are required to justify public spending on loss and damage-related measures (Interviews 1, 13) to move forward loss and damage policy. The study "Costs of Inaction on Climate Change" (Costos asociados a la inacción frente al cambio climático; CEPAL 2022) was presented in the adaptation communication submitted by Chile to the UNFCCC on December 14, 2022 (Government of Chile 2022c). It quantified the costs of inaction toward the middle to end of the century, against the worst-case climate change scenario (i.e., the Representative Concentration Pathways 8.5), in eight key economic sectors: agriculture, drinking water, biodiversity, energy, mining, fishing and aquiculture, harbors and beaches, and health (Government of Chile 2022c, p. 13). For example, the agricultural sector would face an income reduction of 25–28 percent by 2050 (Government of Chile 2022c, p. 13). The adaptation communication warns that the study is not exhaustive, as it does not consider all sectors or sub-sectors susceptible to climate change as well as other impacts where research is not available for the country. Hence, the results "should not be taken as a prediction of future conditions per each sector, but as an exercise to identify some of the potential impacts of climate change" (Government of Chile 2022c, p. 17).

[1] Author's translation of the NDC (p. 10), commitment A2. An official English translation is available, but it does not exactly capture the meaning of the commitment: "By 2021, an estimation of the costs of inaction on climate change, and by 2025 an estimation of costs associated with historic by losses and damage as part of this."

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

The same section contemplates a commitment on climate change-related migration framed as "responses to climate risks and socio-natural disasters" (Government of Chile 2020a Commitment A2 [a] and [c]). The proposed action comprises the development of guidelines on the effect of climate change on human mobility in Chile. The text links it to international commitments, and interviewees identified the guidelines as a response to the topics grouped together under the Warsaw International Mechanism for Loss and Damage (WIM) (Interviews 1, 8). The National Emergency Bureau in the Ministry of the Interior and Public Security (Oficina Nacional de Emergencias del Ministerio del Interior, known as ONEMI) is the institution designated with guideline development, and it has established a multi-sector and multi-actor roundtable to work on policy development related to climate change migration (Government of Chile 2015). Commenting on this specific roundtable, one interviewee noted that there is a preference for focusing on the humanitarian side of loss and damage because other problems – such as agricultural loss and damage – are outside ONEMI's remit (Interview 8).

In contrast to the NDC, which explicitly refers to "climate change loss and damage," many potentially relevant national policies do not use this terminology. However, when asked about "loss and damage," some interviewees referenced contiguous policy domains, including disaster risk management and adaptation. For example, interviewees saw the National Disaster Risk Reduction Policy 2020–2030 (Politica nacional para la reducción del riesgo de desastres) as relevant for loss and damage (Interviews 1, 8). This policy reiterates issues of climate change vulnerability, referencing the National Adaptation Plan (NAP) and the nine vulnerability criteria established by the UNFCCC (Government of Chile 2020c). Its strategic objectives include strengthening disaster risk management governance and developing an integrated system to monitor "damages, losses and needs." Similarly, interviewees identified loss and damage concerns as relevant and related to instruments on climate change adaptation. They mentioned, in particular, the 2022 Climate Change Adaptation Plan, which replaced the 2014 NAP (Interviews 7, 10). Finally, they pointed to sectoral adaptation plans which have been mandated by the LMCC (Interviews 3, 7; see also Madariaga Gómez de Cuenca 2021).

A notable development in Chile's loss and damage policymaking is a direct mention of the issue in the 2022 LMCC. The original draft, introduced by the government for parliamentary discussion in January 2020, did not include any reference to loss and damage (Government of Chile 2020d). Those involved with drafting the bill suggest that Chile's lack of international engagement with the topic accounted for its omission in the first draft (Interviews 1, 7). During parliamentary discussions, references to loss and damage were included in the glossary section, eventually making it into the final text. Article 3 defines losses and damages as the economic, social, and environmental "impacts caused by climate change to which a territory and its population are exposed" (Government of

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

Chile 2022a).[2] The definition makes a distinction between irreversible impacts, calling them "losses," and reversible ones, "damages." It also identifies three types of loss and damage: avoidable, non-avoided, and unavoidable (Government of Chile 2022a). At COP27 in 2022, following on from the Glasgow Pact, Chile presented an updated annex to the 2020 NDC with stronger mitigation commitments, a new institution to address "just transition," and a presentation of the LMCC and the long-term strategy, but no amendments were made to adaptation or loss and damage pillars (Government of Chile 2022b).

Finally, environmental advocates sought to impose a duty on the state to adopt actions to "prevent, adapt and mitigate risks, vulnerabilities and effects provoked by the climate crisis" as part of the discussions during the Constitutional Convention over the course of 2021 and 2022. This language was included as Article 129 in the draft version that emerged from the Constitutional Convention in July 2022. However, the full draft of the convention was rejected in the Constitutional Referendum on September 4, 2022, pointing to some deep-seated divisions in the broader political landscape around constitutional reform in Chile.

9.4 INTERNATIONAL ENGAGEMENT

This section explores three main themes. First, it looks at the role of the Chilean delegation in the UNFCCC negotiations on loss and damage, specifically around the time of COP25. Second, it considers the much lower levels of engagement of nongovernmental Chilean actors with the loss and damage negotiations. Governmental actors, and particularly those working directly in the negotiations or in adaptation and disaster risk management, were found to be much more familiar with international developments on loss and damage than civil society or academia. Third, the section analyses how the international negotiations and its outcomes shape domestic policies.

9.4.1 Presiding COP25

In 2019–2020, Chile held the presidency of COP25 for a two-year period – an unusual arrangement – because of the postponement of COP26 due to the Covid-19 pandemic. The Chilean presidency had implications for domestic climate change actors: It enhanced the relative strength of the negotiation delegation; broadened the range of negotiating topics the delegation was involved with (including loss and damage); and increased the capacity for domestic climate policies teams (Interview 7). Interviews show that prior to COP25 there was no

[2] Instead of using a literal translation of "loss and damages," which would be *pérdida* (singular) *y daños* (plural), the Spanish translation of the Paris Agreement uses *pérdidas y daños* (both plural); hence, many national instruments, such as the NDC or the LMCC, speak of *pérdidas y daños*.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

specific negotiator on loss and damage and that Chile "would rely on AILAC to conduct these negotiations" (Interview 7). AILAC is recognized as a negotiation group within the UNFCCC and is part of the broader G77 plus China bloc of developing countries. It includes Chile, Colombia, Costa Rica, Guatemala, Honduras, Panama, Paraguay, and Peru, with the aim "to generate coordinated, ambitious positions and contribute to the balance in the multilateral negotiations on climate change with a coherent vision for sustainable development that is responsible to the environment and future generations" (AILAC n.d.). Informal conversations with AILAC negotiators suggest that the group emerged on the initiative of the negotiators themselves, who had found themselves unable to cope with the many negotiating streams and were keen to coordinate positions to enhance an otherwise limited impact in the negotiations as individual countries.

Before COP25, the participation of the MMA in adaptation negotiations (which include the loss and damage negotiating stream) was nonexistent. Instead, these were covered by a negotiator from the Ministry of Foreign Affairs who would then report on international developments for consideration in national policy development and implementation processes (Interviews 7, 10). As one interviewee from the MMA noted, their initial lack of involvement was due to budgetary constraints:

> No, there was no money to go to COPs. Someone from the mitigation team would attend, which was the main negotiation topic, and perhaps the office chief if resources became available. Little by little, in recent years the minister [of the environment] joined the delegations and ever since, the topic has become more relevant .... Of course, the political relevance is increasing incrementally. Before, no; not even a chance. I asked many times and fought for it but there was no money. (Interview 10)

Despite the small size of the delegation, Chilean negotiators were quite active within the Adaptation Committee. According to our interviews, this is attributable to the personal interest and motivation of the relevant negotiators rather than a priority of the state at the time (Interview 10).

The Chilean COP presidency marked a dramatic shift in thinking about loss and damage, as the delegation began to take an active role in leading discussions (Interviews 4, 10). During COP25, the presidency worked toward the establishment of the SNLD to address calls for greater technical assistance on loss and damage (Interviews 7, 10).[3] In the year after COP25, the Chilean presidency again focused on the SNLD, which needed to be operationalized and was a priority for the Chilean delegation (Interviews 4, 10). As part of these efforts, in December 2020, a climate dialogue was hosted by Chile and the incoming UK presidency to develop an agreement on the functions of the SNLD.[4] Different Chilean actors interviewed for this research as well as other countries' delegates

[3] But see also UNFCCC (2019).

[4] Description and video recording of the event available at: https://unfccc.int/event/developing-the-santiago-network-for-loss-and-damage.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

recognized the role of Chile's negotiators in facilitating the SNLD's establishment and operationalization and some commented on how the outcome was particularly welcomed by the Small Island Developing States, one of the most active and relevant sets of actors on loss and damage (Interview 7).[5]

9.4.2 Civil Society Actors

The participation of Chilean civil society at COPs or as part of the broader international discussion on loss and damage is very limited: Only three Chilean NGOs had observer status at the time of this research (UNFCCC n.d.). Interviews suggest that only a few actors in this sector are familiar with the concept of loss and damage or engage with it in their NGO activities (Interviews 3, 12). One exception was a young activist who learned about loss and damage while spending some time with YOUNGO, the youth and children constituency of the UNFCCC, when he was studying overseas. The stakeholder suggested that this opportunity to attend the Executive Committee of the Warsaw International Mechanism for Loss and Damage (WIM ExCom) meetings and report to YOUNGO only happened when he was situated within a Global North institution. Since his return to Chile, he noted that "this is not a concept I've worked on so much directly … In Chile we did not do anything because it's not a conversation we have had yet. Coming from the WIM ExCom to report to a group of young people, they would not understand anything. We are only now starting to pick up on loss and damage at our local COY [Conference of Youth]" (Interview 12). The stakeholder also suggested that it was difficult to translate the ExCom's work into the national context:

> ExCom was quite disorganized, problematic. I, to be honest, feel – and this is something that happens to me in general with the UNFCCC, and maybe it is due to the privilege that is required to come into the space of the Convention – but I feel there is too much of a disconnect with the territorial realities. That it is very difficult to bring those realities to the conversation and for those realities to be ultimately reflected in how these international policies are being drafted and developing. (Interview 12)

Other NGOs and civil society actors we engaged with were either unfamiliar with the topic or were upfront about not being interested in the international negotiations (Interviews 2, 3, 9). One of them described her lack of engagement and interest in the international dimension of climate change as a consequence of the historic failures of the process and particularly the legacy of the failure at COP15 to reach a binding international agreement (Interview 2).

9.4.3 International Instruments and National Policies

Domestic climate law and policy are influenced by international discussions, instruments, and their framing. This sometimes acts as a driver, promoting

[5] This also became clear through author's participant observation at COP26.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

new developments in policy, while in other cases it is perceived more as a barrier to engaging with the types of climate challenges faced at the national level. This explains, for example, the framing of loss and damage as disaster risk management (DRM) within domestic policies and their alignment with international law instruments.

Interviews conducted at ONEMI (Interviews 7, 8, 10), as well as a document review of the national policies (Government of Chile 2020a, 2020c), show a link between the Paris Agreement and the Sendai Framework on Disaster Risk Reduction, on the one hand, and the domestic policies, on the other. In general, interviewees suggested that "the Sendai Framework and the Paris Agreement shape the platform for risk reduction and prevention" (Interview 8) and "the Paris Agreement and the negotiations set the topics to be addressed" (Interview 10). Indeed, the Sendai Framework has been seen to contribute significantly to shaping DRM policies, including those related to climate change risks (Interview 8). One of the interviewees exemplified this when referring to DRM policies and using the same timelines as the international instrument: "It is important and it is a commitment according to Sendai, we should show some progress for 2030" (Interview 8).

On adaptation, however, the slow progress at the international level is seen, in some contexts, as an obstacle to developing domestic adaptation policies. Likewise, the international preference for mitigation funding is also regarded as a barrier to seeking international support for adaptation-related initiatives. One interviewee noted that resource allocation plays a significant role in focusing policy in certain directions:

> I see this as very related to resources, and developed countries, for a long time, have emphasized mitigation, which was the most relevant topic for them. Including [adaptation] entailed starting a conversation about finance with developing countries and more vulnerable countries. I think [adaptation was avoided] because of these two circumstances: mitigation and not getting into problems and disbursing money. (Interview 10)

Lack of guidelines and direction from the international level was another factor interviewees pointed to in explaining the more embryonic development of adaptation policies compared to mitigation policies at the national level:

> It is as if the general outcome was "countries have the freedom to adapt as they wish. What is important is that adaptation is met." There was not much input coming, nor much input we could deliver. I know some progress has been made but there is still no agreement on what will be in the adaptation communication, which indicators should be used, what agreements will be reached on the global stocktake for adaptation. I believe adaptation as a topic is very weak at the international level. (Interview 10)

This idea that the international sphere focuses excessively on mitigation to the detriment of other facets of climate policy was shared more widely (Interviews 2, 4, 9, 10).

Research participants noted that this international influence can also sometimes act against a more ambitious national climate policy. As noted in Section

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

9.3, criticism arises particularly around the 2050 decarbonization target, prompted by the Paris Agreement. One interview noted that international mitigation targets might have created the conditions for a less ambitious national decarbonization plan:

> There was a possibility to move decarbonization ahead to 2040 during the parliamentary discussion of the climate change framework law bill, which is relevant for the local reality of sacrifice areas, but the argument of the international community setting the 2050 goal permeated the decision to leave it as such. (Interview 2)

The 2040 goal was deemed important at the national level as a way to bring forward the end of coal-generated energy and other activities conducted in the "sacrifice areas" (see Section 9.3).

9.5 INSTITUTIONS

Throughout our interviews, institutional dynamics were consistently identified as major obstacles to dealing with climate change in general and grappling with loss and damage more specifically. There is a perceived weakness of the MMA compared to ministries related to productive sectors, such as agriculture, mining, fisheries, economy, development, and tourism. This weakened position is institutionally represented by the role of the Council of Ministers for Sustainability (CMS), which was seen to impede further development of national environmental policies. Actors also perceived a need for better institutional coordination on how to respond to the complexity and transversality of climate change impacts. Centralism, on the other hand, is portrayed as a barrier to the development of regional and local climate impact policies.

9.5.1 MMA

Challenges that were identified by interviewees in developing effective responses to loss and damage arising from climate change concerned the perceived weakness of the MMA. This was linked to resource limitations, domination by other larger ministries, and/or features of its institutional design. For example, one interviewee, when commenting on the urgent need to articulate a multi-level governance framework to address climate change, highlighted the relatively low resources of the MMA as one of the main barriers to better governance of loss and damage. The stakeholder asked:

> Who should do this coordination? The Ministry of the Environment. And they do it, but not up to the standard needed to deal with the complexity of the challenge. There are several reasons for that, not as much willingness …; the resources of the Ministry of the Environment are so scarce, specially compared to the ones of, for example, the Ministry of Energy. The Ministry of Energy can conduct a consultation process where this single process cost is equivalent to the yearly budget of the whole Ministry of the Environment. (Interview 4)

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

Established in 2010, the MMA was granted limited influence over environmental policy; all relevant activities producing environmental impact are under the jurisdiction of other ministries, for example, agriculture, energy, forestry, and fishing. The MMA has little to no influence over the development model or development planning. It deals primarily with negative externalities of productive activities, for example, waste regulation or decontamination plans. Its influence in these areas might grow as a result of the recently created National Service for Protected Areas (Servicio Nacional de Áreas Protegidas, SBAP), which places biodiversity management under the authority of the MMA. However, the ministry is still not involved in water management or the allocation of water rights, which, as will be discussed in Section 9.6, is a main ecological concern for the country (Government of Chile 1981). Even the environmental impact assessment process is managed by an independent body established outside of the realm of the MMA (Government of Chile 1994 Article 8).

The 2022 LMCC goes a step forward in granting more climate policy responsibility to the MMA. Indeed, the ministry is responsible for the drafting of the main instrument of the law, namely, the "long term strategy," which outlines mitigation, adaptation, and loss and damage policies (Government of Chile 2022a Article 5). However, the law maintains a sectoral approach to adaptation and mitigation plans, where the concrete steps to achieve goals and commitments are made. As this approach and these plans existed prior to the LMCC, these remain in the realm of the respective ministries, giving the MMA a coordination role (Government of Chile 2022a). One interviewee related her experience coordinating climate change adaptation plans:

> Obviously, it [the MMA] has no weight. Actually, when I worked there I realized how frustrating it is, because you have to go and ask other ministries for favors. "Please, would you be so kind to please make an adaptation plan for your sector?" What? The Ministry of the Environment should be demanding productive ministries to deliver on minimum requirements for their processes. (Interview 9)

This weakened position of the MMA does not only emerge from the (lack of) allocated functions and competences and a scarce budget but also from its institutional design. Indeed, regulation, policy, and activities produced and delivered by the ministry must be agreed to by ministers from all productive sectors through the CMS (Government of Chile 1994 Article 71). Chaired by the MMA and composed of ministers across multiple sectors including agriculture, finance, health, housing transport, and mining, the CMS's aim is to provide a more transversal approach to environmental protection. However, some interviewees, including those in academia, suggested that it instead operates as a filter to block progressive environmental policymaking and to undermine the decision-making power of the MMA (Interviews 2, 3).

The LMCC dictates that all instruments – including those of relevance for climate change loss and damage, like the aforementioned "long term

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

strategy," will be subject to approval by the CMS, solidifying its position as a key gatekeeper to climate action (Madariaga Gómez de Cuenca 2021). If the CMS maintains its current performance trend, this might operate against climate ambition, instead of promoting it. Indeed, a study examining the agreements of the CMS since its creation in 2010 shows that "it has not contributed significantly to promoting the environmental component in public policy" (Richter 2021). During the discussion of the law, members of parliament and other actors expressed concerns about the mediating role of the CMS over climate policies and instruments set out in the law.[6] This led to introducing transparency requirements to the CMS in order to enhance accountability (Interview 13).

9.5.2 Lack of Coordination

The multidimensional and interdisciplinary nature of grappling with climate change impacts demands coordination among different actors and institutions. This was highlighted as a key institutional constraint to addressing loss and damage and adaptation. The country takes a sectoral approach to many of these issues, for example, the drafting of mitigation and adaptation plans, as mentioned in Section 9.5.1. These are called "sectoral mitigation plans" or "sectoral adaptation plans" (Government of Chile 2022a Articles 8, 9). While the first apply to ministries with an obligation to reduce emissions, the second relate to thematic areas where adaptation is required but that are allocated to the ministry perceived as most relevant to that topic. For example, the Transport Mitigation Plan is to be drafted by the Ministry of Transport to comply with their allocated emission budget, and the Coastal Adaptation Plan is to be drafted by the Ministry of National Defense (Government of Chile 2022a). One actor noted: "Chile is one of the few countries with a very strong sectoral approach of their plans, which, on the one hand, works against unity, because of fragmentation, but on the other hand, it offers a good level of detail. In other places, there are large national plans, with the same breath as one of the sectoral plans in Chile" (Interview 4). This lack of institutional coordination is perceived as a problem for authorities dealing directly with loss and damage as well. ONEMI, Chile's DRM public authority, effectively participates in the formulation of NDCs and adaptation plans as well as their sectoral plans, but in interviews the members highlighted a lack of coordination across bodies and multilevel institutions as an obstacle for their engagement with the loss and damage agenda (Interviews 1, 8). When asked if loss and damage was relevant for the country, an actor suggested:

[6] Including the author, see presentation at the Senate Environment Commission on January 27, 2020. Recording available at: https://tv.senado.cl/tvsenado/comisiones/permanentes/medio-ambiente/comision-de-medio-ambiente-y-bienes-nacionales/2020-01-27/112257.html

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

I am saying yes because there is a larger awareness of the need and relevance of generating responses [to climate impacts], but it is not part of our day-to-day … to even know if we are investing enough in DRM because we don´t know how much we are really investing. Ministries are not aware of this; hence, they do not consider it in their budgets. (Interview 1)

It is worth noting that government actors we interviewed and documents we analyzed pointed to a number of recent efforts to strengthen cross-sectoral coherence and integration. First, the Interministerial Technical Team for Climate Change (Equipo Técnico Interministerial para el Cambio Climàtico, ETTIC) was established in 2019 under the umbrella of the NAP. The body assists the MMA in preparing, implementing, and monitoring climate change-related instruments and is composed of representatives drawn from climate change-related institutions. Second, the Gender and Climate Change Interinstitutional Working Group was also formed in 2019 as part of the COP presidency activities and integrated the Gender Negotiating Cluster of the Ministry of Foreign Affairs; the Climate Change and International Affairs Offices of the MMA; and the Ministry of Women and Gender Equality. However, most actors we spoke to did not mention these bodies, potentially because of their relatively recent establishment. Third, the Roundtable on Human Mobility, Climate Change and Disasters was established, composed of representatives of the public sector, academia, and civil society. It is working to expand knowledge on the phenomenon of human mobility in the context of climate change and develop guidelines for public policy, at the national and sub-national levels (Interview 8).

9.5.3 Centralism

Government, academic, and NGO interviewees all pointed to the high degree of centralization in Chile's political governance as a challenge when adapting to climate change. The perception is that a more locally focused model is needed because "the diversity of the territory requires this approach" (Interview 3). Actors working with local governments identified several barriers to their involvement with policymaking that are relevant for adaptation and addressing loss and damage. First, interviewees pointed to existing regulation and the limitations of the competencies that have been granted to local governments. One interviewee noted that the Municipalities Act gives local governments DRM-related functions, without fleshing out specific ways that would allow them to develop proactive programs, observing that "they get used to generating good reactive instruments, because they cannot be preventive" (Interview 3). A lack of jurisdiction in relation to land use is another legal barrier suggested by the same interviewee: "Further flexibility in municipal programs is required for, for example, [preventing and managing] fires. Despite the fact that local governments understand which adaptation processes would be more effective, they are constrained by large legal obstacles, like private property regulation"

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

(Interview 3). Second, a lack of resources was named by most interviewees as a limitation in grappling with climate change impacts. One stakeholder noted that "municipalities have so many challenges, and climate change adaptation is one more [in addition] to many others with no extra budget" (Interview 3). Another mentioned that when attempts are made to implement DRM functions, the response of municipalities tends to be "with what money?" (Interview 6). A related barrier, as another interviewee suggested, concerns low levels of capacity: "There can be a mandate, even budget to have an instrument, a plan for example, but that does not mean that you have trained staff to design, implement or evaluate that plan …. In the municipalities, effectively there are no resources, human resources I mean, and trained personnel to address this issue from the local realities" (Interview 3). However, there is some progress toward more decentralized climate governance. Stakeholders identified areas of the LMCC that have allocated climate change-related functions to local governments, including an obligation to develop regional adaptation plans and local water management plans (Interview 3).

9.6 IDEAS

Interview data shows that national loss and damage governance is highly reliant on science and cost–benefit analysis tools. Indigeneity is very important in practice and produces valuable knowledge; however, it is not very present in national-level regulation. This section identifies ways in which identities are shaping the relevance of loss and damage. First, it contends that the (self-) perception of the country as middle income affects the role and approach of Chile in the international negotiations. Second, it argues that the extractivist model of development coupled with a dominant neoliberal ideology shapes the possibilities for action on adaptation and loss and damage.

9.6.1 Knowledge

A general finding from across interviews is that a significant number of actors rely on science and are able to prompt research needs to support the further development of loss and damage governance at the national level. Government officials and non-state actors identified hard-science research needs: meteorological studies, glacier, snow measurements, and so on. (Interview 7). They also called for economic-oriented research needs, pointing specifically to the need for cost estimations of loss and damage (Interviews 1, 4, 7, 8, 10). Indigenous knowledge and practices, however, were notably absent from our discussions.

The most commonly mentioned adaptation and loss and damage science-based instrument is the Climatic Risk Map (Atlas de Riesgo Climatico, known as ARClim), financed by the German International Cooperation Society

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

(GIZ) and developed in 2019–2020. ARClim is a set of maps related to climate change risks for Chile that incorporate medium-term climate projections. These maps show information on hazards, exposure, sensitivity, and risks of selected systems at the community level. The maps are displayed on an online platform which allows dynamic visualization and data downloading, with the idea that it will become a tool for public policy and adaptation (Interviews 4, 8, 10). At the time of writing, the MMA is developing adaptation indicators using the ARClim. A second main instrument flagged was the evaluation of costs of inaction, which was seen as a way of making action politically viable (Interviews 3, 7, 10, 13). This instrument is meant to quantify adaptation needs and articulate the economic cost of losses and damages arising from climate change, allowing for a financial justification for addressing loss and damage, which many actors see as a requirement for developing policy (Interviews 1, 4, 7, 8).

When discussing research needs, a significant number of interviewees spontaneously shared an unearthed criticism of the role of academia and how the types of research being undertaken are not sufficiently relevant to either policymakers or to civil society: "Papers are very pretty for academia, are very interesting, but everyone else would not read them, and if they do, they don't understand them, and if they understand them, they are not useful for their task" (Interview 4). Hence, "closing the link between academia and civil society is important" (Interview 11).

There was a notable absence when participants discussed the role of knowledge, science, research, and evidence: Most research participants did not refer to Indigenous knowledge and practices as relevant for addressing loss and damage. Only a couple of civil society actors went beyond traditional science and called for a need to integrate Indigenous knowledge (Interviews 3, 4, 5, 6). Research has found that Indigenous knowledge is of particular importance in considering approaches to adequately address climate change impacts and to incorporate other forms of knowledge and practices into national policies (Haboucha & Jofré 2021). Valuable adaptative practices are being developed and deployed by Indigenous populations as a response to climate change. For example, as one research participant noted, a form of local climate migration or temporary displacement has long been practiced by the Indigenous communities in the north of Chile:

> People have been living in the altiplano region all their life and it is not a problem. Many years ago, I visited Arica, affected by an altiplano winter crisis, and they explained, "We are used to living in various levels. When the weather is good, we go up and if it gets bad, we go to the family living one level down. If it gets worse, then we go to the next. This is not an issue for us, we live like this. For us, there is not really a risk, it is our way of living." (Interview 5)

Institutions do not recognize these grassroots Indigenous adaptation measures. An interviewee suggested: "It is difficult to understand these cosmologies and

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

paradigms [that are] so different. The challenge there, of course, is to validate these ways in which communities are adapting to risks" (Interview 6). Using these practices to inform policymaking can be an efficient way to grapple with loss and damage arising from climate change.

9.6.2 Identities

Two identities were suggested as crucial to two dimensions of loss and damage governance. First, the perception of the country as a high-/middle-income or emerging economy affects the level of engagement of the country with the international dimension of loss and damage. Second, the dominance of the extractivist model of development acts as both a material and an ideational hurdle to an appropriate response to the most severe climate impacts.

According to the Organisation for Economic Co-operation and Development and the World Bank, Chile became a high-income country in 2013 (World Bank Group n.d.). At the same time, however, it is also one of the most unequal countries in Latin America and the Caribbean (UNDP 2021). Many of our research participants referred to the country's economic status as a matter of identity. Negotiators note that Chile would not directly benefit from a loss and damage finance mechanism because of its income status, to which they refer (despite its high-status categorization) as "middle income." One stakeholder suggested that loss and damage was not a concern for Chile but for "less developed countries … Of course, because we are a middle-income country this is something that also does not act in our benefit from the international perspective …. Even now, when engagement is larger, this identity shapes the country's views, as for example, they do not believe climate finance would ever reach Chile" (Interview 7). Other actors shared this view of Chile as not benefiting from potential international loss and damage finance, suggesting that most UNFCCC regulation and financial instruments are mitigation-oriented, except for funds dedicated to developing policy instruments (Interviews 2, 10):

> The topic is very important. Regarding negotiations and what could one get from those, I do not know because I see more loss and damage in small island states, those countries that have no way around, really. Chile is a country that maybe is a bit better prepared, and I do not know if we will have so much loss and damage. (Interview 10)

At the same time, however, the same interviewee reckoned that "we have no knowledge either, we have not assessed loss and damage, for example. We know we are vulnerable; we know we can adapt, and adaptation has a limit, but we have not assessed what these losses and damages could be" (Interview 10).

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

A second way in which identity influences approaches to loss and damage in Chile is the model of development aligned with neoliberalism. Several actors identified the extractivist economic model as a limiting barrier to addressing climate change (Interviews 2, 3, 9). For example, water scarcity is severe and at least 25 percent attributable to climate change. It is already causing dramatic loss and damage and resulting in people being displaced to urban areas or to the south of Chile (Benfeld 2022; Montes 2021). Water scarcity is compounded by Chile's unique water governance model that allows for privatization of this key resource (Government of Chile 1981). Water rights are regulated in the Water Code of 1980 and the Chilean Constitution of the same year, which guarantees private and imprescriptible property of these rights (Government of Chile 1981). Only in 2005 was the Water Code amended to include an "ecologic flow" and a "human consumption flow" as limits to the assignment of water rights. These are only applicable to newly granted rights, but many water basins are already over-granted (Government of Chile 1981).

According to the first report of the National Water Table, in 2015 the agricultural sector was consuming 72.3 percent of the water supply (INDH 2021), with only 11.2 percent being distributed as drinking water (INDH 2021). However, over 47 percent of the population in Chile live in water scarcity zones, according to recent designations (Government of Chile 2020b). One interviewee brought up the avocado industry as an example of large-scale agriculture that entails the consumption of large amounts of water, even in areas of the country where populations are struggling to have access to drinking water. The interviewee framed it as a North–South extractivist dynamic:

> Almost 60 or 70 percent of the avocados we grow in Chile are for export .... A substantial percentage goes to Japan, China, and Europe in general, which are countries that can live perfectly fine without avocado, because it is a luxury. Guacamole, and sushi are fashionable, and those countries never limit themselves in consumption. Chile, México are emptying their water reservoirs to grow avocados. "I don't care, I don't see it. I want to eat avocado." (Interview 9)

The Petorca community is a paradigmatic example of this. Previously a traditional agriculture and kettle region, the concentration of water rights for avocado crops has led to significant loss of livelihood (Benfeld 2022; Montes 2021) and deprived small farmers and the local population of their access to drinking water (Interview 11). Because of the level of degradation, with the root cause being extractive activity, some actors refer to these areas in a similar way to the areas of coal mining, as "sacrifice areas." This situation has led to international and national activism and litigation. On March 23, 2021, the Supreme Court of Chile ruled in favor of the Chilean National Human Rights institution on a claim against the Petorca regional government and the Ministry of Health for their failure to guarantee access to water. The judgment

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

established a government duty to guarantee 100 liters of water per person per day (INDH 2021).

Regulation and water governance were signaled in our interviews as factors that place a hard limit on addressing water scarcity (Interview 4). When asked about the larger challenges to adaptation, one actor noted the "institutional limits" that any adaptation measures might face: "There is little control, several impacts .... There are many adaptation measures that could be implemented but there are institutional limits. They do not have the water rights for that" (Interview 4).

9.7 CONCLUSION

Table 9.1 synthetizes the main results from our analysis along the four dimensions of the analytical framework we developed in Chapter 2. This chapter shows that the Chilean presidency of COP25 led to a significantly larger engagement of the Chilean government and delegation with loss and damage in the international sphere, going from being uninvolved in loss and damage negotiations to leading the Santiago Network implementation discussion. This research unveils that, together with limited resources to fund delegates, the identity of Chile as a high-income country acted as a disincentive to prior engagement, based on the understanding that no loss and damage finance would benefit Chile. The presidency acted as a driver to take the lead on the topic at the international level, but the country's economic identity still acts as a constraint on the domestic development of adequate responses to loss and damage and on engagement with the loss and damage terminology, although there are some recent developments, such as the inclusion of loss and damage in the LMCC, the country's framework law.

Non-state actors are worried about Chile experiencing loss and damage, especially water scarcity. Nevertheless, they fail to engage with this concept at a policymaking level, nor do they participate in the international discussion. Loss and damage as a concept has not permeated Chilean civil society. This is not the case for government actors, who are increasingly engaging more with the concept, especially officers from DRM institutions and the MMA. This trend is limited by an institutional design that does not facilitate their ownership of the topic but acts instead as an obstacle to developing further loss and damage national governance. The relatively weak position of the MMA, the strict centralist government model, and the limited coordination among institutions were prompted by interviewees as the main barriers to engagement. Similarly, the example of water resource allocation, as well as the prioritization of agriculture over human consumption, indicates where Chile's governance priorities lie. Here we see how a national identity embedded in neoliberalism can not only fail to address climate impacts but also exacerbate them.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

TABLE 9.1 *Summary of Chile*

Key climate change hazards, risks, and impacts	Key policies in adjacent policy domains	International influences	Institutional insights	Ideas
• Water scarcity • Increasing temperature • Heat waves and droughts • Reduced rainfall • Floods and landslides • Glacial retreat • Ocean acidification	• National Disaster Risk Reduction Policy 2020–2030 • Climate Change Framework Law (2022) • 2050 Long Term Climate Strategy • NDC (2020, updated) • 2022 Climate Change Adaptation Plan • Cost of inaction policy • Climate emergency declaration (2020, signed by several regional governments) • New Constitutional Convention (2022) contains explicit provision on climate crisis • NAP (2017) • First updated NDC (2020)	• COP25 changed country approach; historically, Chilean government relatively distant from discussions happening at international level (before COP25); used to be represented in loss and damage negotiations by AILAC • International instruments: UNFCCC and Sendai • International finance • Support from GIZ (financial support to produce a Risk Map ARClim 2019–2020)	• No explicit policy measures on loss and damage • Since COP25, Chile has been one of the main promotors of Santiago Network • At national level: emerging recognition and engagement with loss and damage (e.g., inclusion of three losses and damages commitments in the adaptation pillar of Chile's NDC and awareness about vulnerabilities and the need to address loss and damage from different sectors of society) • Government actors were largely familiar with loss and damage but tended to situate it as a concept relevant at international level • Institutional dynamics and design impede progress at national level: relative weakness of the Ministry of Environment compared	• Participants argued that Chile would not benefit from a loss and damage finance mechanism because of its middle-income country status ○ Civil society and DRM institutions do not share this approach and think loss and damage is a key issue for Chile and that international support is essential to address them • Extractivist model of development coupled with a dominant neoliberal ideology shapes the possibilities for action on adaptation and loss and damage • Civil society actors show little engagement with the international discussion and loss and damage framework • National loss and damage governance is highly reliant on research and science and cost–benefit analysis tools

(*continued*)

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

TABLE 9.1 (*continued*)

Key climate change hazards, risks, and impacts	Key policies in adjacent policy domains	International influences	Institutional insights	Ideas
			to ministries related to productive sectors like agriculture, mining, fisheries, economy • Chile's sectoral approach to policymaking characterized by good level of detail but also fragmentation • High degree of centralization in Chile's political governance as a challenge for adaptation. The perception is that a more locally focused model is needed • Municipalities (Local Governments) Act gives local governments DRM-related functions, without fleshing out specific ways that would allow them to develop proactive programs; also challenge of limited resources to address climate change at municipality level	• Indigeneity is very important in practice and produces valuable knowledge; however, it is not very present in the national level regulation or integrated into research • A new constitution and a "green government" could be the beginning of a dramatic change in Chile climate policy, including loss and damages

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

REFERENCES

AILAC. (n.d.). About. Asociación Independiente de América Latina y el Caribe. Retrieved from http://ailac.org/sobre/

Benfeld, G. S. (2022). Migrantes climáticos: llegamos tarde una vez más. *El Mostrador*. Retrieved from www.elmostrador.cl/destacado/2022/02/24/migrantes-climaticos-llegamos-tarde-una-vez-mas/#:~:text=La%20falta%20de%20agua%20y%20el%20rápido%20avance,ha%20llegado%20al%20204%25%20producto%20de%20las%20migraciones

Bustos, S., Gallardo, L., Garreaud, R., & Tondreau, N. (eds.). (2015). Informe a la Nación: la megasequía 2010–2015: Una lección para el future. Centro de Ciencia del Clima y la Resilencia. Retrieved from https://repositorio.uchile.cl/bitstream/handle/2250/136717/Megasequia-2010-2015.pdf?sequence=1&isAllowed=y

CEPAL. (2022). *Costos asociados a la inacción frente al cambio climático*. Santiago: Comisión Económica para Latinoamérica y El Caribe.

Dannemann, V. (2022). El cierre del "Chernobyl chileno" aviva el debate entre salud y economía. Deutsche Welle. Retrieved from www.dw.com/es/el-cierre-del-chernobyl-chileno-aviva-el-debate-entre-salud-y-econom%C3%ADa/a-62292514

Deutsche Welle. (2022). Chile: CODELCO anuncia cierre de la "Fundición Ventanas." Deutsche Welle. Retrieved from www.dw.com/es/chile-codelco-anuncia-cierre-de-la-fundición-ventanas/a-62175669

Government of Chile. (1981). Código de Aguas, Biblioteca del Congreso Nacional de Chile. Retrieved from www.bcn.cl/leychile/navegar?idNorma=5605&idVersion=2022-04-06&idParte=

Government of Chile. (1994). Law No. 19300. Biblioteca del Congreso Nacional de Chile. Retrieved from www.bcn.cl/leychile/navegar?idNorma=30667&idVersion=2022-06-13&idParte=8640082

Government of Chile. (2015). Resolución Exenta No. 402. Oficina Nacional de Emergencias del Ministerio del Interior. Retrieved from www.bcn.cl/leychile/navegar?idNorma=1174018

Government of Chile. (2020a). Chile's Nationally Determined Contribution (NDC): Update 2020. United Nations Framework Convention on Climate Change. Retrieved from https://unfccc.int/sites/default/files/NDC/2022-06/Chile%27s_NDC_2020_english.pdf

Government of Chile. (2020b). Decree No. 44, 2020. Government of Chile.

Government of Chile. (2020c). Politica nacional para la reducción del riesgo de desastres 2020–2030. Decreto No. 434, Oficina Nacional de Emergencias del Ministerio del Interior. Retrieved from www.bcn.cl/leychile/navegar?idNorma=1157003

Government of Chile. (2020d). Proyecto de ley, iniciado en mensaje de S. E. el Presidente de la República, que fija Ley Marco de Cambio Climátic.No. Boletín N° 13.191-12, Government of Chile. Retrieved from https://leycambioclimatico.cl/wp-content/uploads/2020/07/ProyectoLeyCC_13012020.pdf

Government of Chile. (2022a). Chile Climate Change Framework Law. Biblioteca del Congreso Nacional de Chile. Retrieved from www.bcn.cl/leychile/navegar?idNorma=1177286

Government of Chile. (2022b). Fortalecimiento de la contribución determinada a nivel nacional (NDC). Ministerio del Ambiente, Government of Chile. Retrieved from https://unfccc.int/sites/default/files/NDC/2022-11/Chile_%20fortalecimiento%20NDC_nov22.pdf

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009

Government of Chile. (2022c). Primera Comunicación de Adaptación de Chile. United Nations Framework Convention on Climate Change. Retrieved from https://unfccc.int/sites/default/files/ACR/2022-12/Comunicación%20de%20Adaptación%202022.pdf

Haboucha, R., & Jofré, D. (2021). Safeguarding indigenous heritage in the Chilean Atacama Desert: Negotiating identity claims and community perceptions of long-term climate change. *Heritage & Society*, **14**(2–3), 216–241.

INDH. (2021). Corte Suprema revoca fallo y fija un mínimo de 100 litros de agua por persona al día para Petorca, Instituto nacional de derechos humanos. Retrieved from www.indh.cl/corte-suprema-revoca-fallo-y-fija-un-minimo-de-100-litros-de-agua-por-persona-al-dia-para-petorca/

Jarpa Solar, M. J. (2020). La vulnerabilidad de Chile frente al cambio climático (El Desconcierto). Center for Climate and Resilience Research. Retrieved from www.cr2.cl/la-vulnerabilidad-de-chile-frente-al-cambio-climatico-el-desconcierto/

Labbé Céspedes, N., & Palma Calorio, P. (2019). Comentario Jurisprudencia. Excelentísima Corte Suprema. Rol 5888-2019 Caratulado "Francisco Chahuan Chahuan contra Empresa Nacional de Petroleos, Enap S.a," Información jurídica inteligente Chile. Retrieved from https://vlex.cl/vid/excelentisima-corte-suprema-rol-843856908

Leija, L. (2022). El "Chernóbil chileno": más de 100 personas intoxicadas en dos localidades de Chile. *National Geographic En Español*. Retrieved from www.ngenespanol.com/el-mundo/chernobil-chileno-que-paso-en-las-ciudades-de-quintero-y-puchuncavi/

Madariaga Gómez de Cuenca, M. (2021). Is Chile building good climate governance? Reflections on the drafting process of the climate change framework law. *Environmental Law Review*, **23**(1), 40–48.

Montes, C. (2021). Migrantes climáticos en el país: el drámatico éxodo de miles de chilenos debido a la sequía y el clima extremo. *La Tercera*. Retrieved from www.latercera.com/que-pasa/noticia/migrantes-climaticos-en-el-pais-el-dramatico-exodo-de-miles-de-chilenos-debido-a-la-sequia-y-el-clima-extremo/SJWQI6A3BZBANPSF23I2XP3RNU/

Pellicciotti, F., Ragettli, S., Carenzo, M., & McPhee, J. (2014). Changes of glaciers in the Andes of Chile and priorities for future work. *Science of the Total Environment*, **493**, 1197–1210.

Richter, O. (2021). Analysis of the agreements of the Council of Ministers for Sustainability. *Revista de Derecho Ambiental*, **16**, 217–239.

UNDP. (2021). *Trapped: High Inequality and Low Growth in Latin America and the Caribbean*. REGIONAL HUMAN DEVELOPMENT REPORT 2021. New York: United Nations Development Programme. Retrieved from www.undp.org/latin-america/publications/regional-human-development-report-2021-trapped-high-inequality-and-low-growth-latin-america-and-caribbean

UNFCCC. (2019). Decision 2/CMA.2 Warsaw International Mechanism for Loss and Damage associated with climate change impacts and its 2019 review. United Nations Framework Convention on Climate Change. Retrieved from https://unfccc.int/sites/default/files/resource/cma2_auv_6_WIM.pdf

UNFCCC. (n.d.). Admitted NGOs. United Nations Framework Convention on Climate Change. Retrieved from https://unfccc.int/process/parties-non-party-stakeholders/non-party-stakeholders/admitted-ngos/list-of-admitted-ngos

World Bank Group. (n.d.). Chile. The World Bank Group. Retrieved from https://data.worldbank.org/country/CL

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 10:55:37, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009565080.009