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The 'national turn' in climate change loss and damage governance research: constructing the L&D policy landscape in Tuvalu

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ABSTRACT

Loss and damage (L&D) is now a key area of climate policy. Yet studies of L&D governance have focused disproportionately on the international level while the national scale of analysis has been overlooked. Recent developments in the UNFCCC negotiations and a growing call for a 'science of loss' that can support policy-makers to address L&D suggest the need for a greater understanding of L&D governance at the national level. How do national policy-makers understand the concept of L&D? What types of policies have been developed, implemented and funded to address L&D? We study the paradigmatic case of Tuvalu to illustrate the value of turning to the national level of analysis, while recognizing that other countries might frame L&D and its relevance for the national context differently, and thus devise a diverse set of policy responses. Drawing on semi-structured interviews with national stakeholders and a systematic policy review using methods of interpretive policy analysis, we show that the concept of L&D was introduced in official documentation in 2012 and is not explicitly distinguished from adaptation. We find that managing L&D constitutes a complex governance system with competencies and responsibilities diffused across different national actors and multiple governance scales. As conceptualized by policy-makers and within policy documents, L&D is closely tied to issues related to national sovereignty, human mobility, infrastructure investment and protection of the Exclusive Economic Zone. We conclude by suggesting that there is a need for a 'national turn' in research on L&D governance to produce knowledge that will support policy-makers, but also argue that national level analyses will always need to be situated within a multi-scalar context.

Key policy insights:

- Conceptual understandings of L&D and how it is distinct from adaptation do not translate neatly into national policy-making practices.
- In Tuvalu, L&D does not feature as a stand-alone policy domain, but rather it is treated as a cross-cutting issue.
- National responses to L&D might involve action at the regional and international level.
- The establishment of the Santiago Network at COP25 provides new impetus for considering how to govern climate change L&D at the national level.

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1. Introduction

Over the last decade, climate change loss and damage (L&D) has emerged as a key area of climate policy. In many ways the current conceptualization of L&D was established – and continues to be 'situated' (at least

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by most existing scholarship) – at the international level. McNamara and Jackson (2019) show that research on L&D governance has focused almost exclusively on the international climate regime. We have a much less well-developed understanding of how countries are grappling with L&D policy-making because the national scale of analysis has been largely overlooked (but see Thomas & Benjamin, 2018b, 2020, 2018a; Vanhala et al., 2021; Wewerinke-Singh & Salili, 2020 for exceptions). Recent developments in the UN Framework Convention on Climate Change (UNFCCC) negotiations, as well as a growing number of calls for a ‘science of loss’ (Barnett et al., 2016) that can support decision-makers to develop policies to address L&D, suggest that we are on the cusp of what we refer to as a ‘national turn’ in L&D governance.¹ This trend raises a number of important and pressing questions: how do national policy-makers understand the concept of L&D? What types of policies have been developed, implemented and funded to address L&D? Where is L&D included (or not) in the wider climate governance landscape at the national level? Addressing these questions can help identify gaps in knowledge to support L&D policy-making from the global to the local level, and identify potential tensions and barriers within L&D policy-making processes.

While the idea of L&D was introduced in the early 1990s by the Alliance of Small Island States (AOSIS) in the UNFCCC negotiations, it has become increasingly institutionalized at the international level over the last decade. In the absence of an official definition under the UNFCCC, different ways of distinguishing adaptation and L&D have been proposed and applied from practitioners and academics (Broberg & Romera, 2020). Current scholarly understandings of L&D often emphasize the unavoidability and irreversibility of certain climate change impacts and the role played by constraints and limits to adaptation as drivers of adverse outcomes (Mechler et al., 2020). Such adverse outcomes – which are understood to result from climate change-related slow onset hazards and extreme weather events – include both monetizable impacts as well as non-economic losses (NELs), such as loss of biodiversity, territory, cultural heritage, and climate-induced human mobility (Serdeczny et al., 2018). This institutionalisation process has included the establishment of new mechanisms and bodies within the UNFCCC – such as the Warsaw International Mechanism on Loss and Damage (WIM) and its Executive Committee (ExCom). The most recent step in this process was the adoption of a decision at COP25 establishing the Santiago Network for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change. The stated aim of the network is to catalyze the technical assistance of relevant organizations, bodies, networks and experts, for the implementation of relevant approaches at the local, national and regional level, in developing countries that are particularly vulnerable to the adverse effects of climate change (UNFCCC, 2020). The demand for this new body, as well as requests in the negotiations for support in undertaking what some actors referred to as ‘L&D needs assessments’ at the national level, highlights the need for a ‘national turn’ in research on L&D governance.

An emerging body of research on L&D governance at the national level has developed along two main strands. The first has been concerned with documenting several policy deficiencies in states’ abilities to address L&D at the national scale in Small Island Developing States (SIDS). For example, Thomas and Benjamin (2018b) assessed the state of L&D management in both Caribbean and Pacific Islands and found that it is constrained by a lack of data, gaps in financial assessments and the absence of specific policies or mechanisms that address L&D in a holistic manner. Focusing on climate-induced migration and displacement, Thomas and Benjamin (2018a) found that only a few SIDS have related policies and mechanisms in place. In a more recent case study on displacement and resulting NELs in The Bahamas, they found that no consideration was given to these issues in national policies or government action (Thomas & Benjamin, 2020). A second strand of national level analysis on L&D explores politically situated understandings of the concept among national level policy actors. Vanhala et al. (2021) investigated the type of knowledge and ideas national policy-makers and civil servants in Antigua & Barbuda draw on when conceptualizing L&D as a governance object. They identified several barriers to policy-making, including a lack of shared heuristics about what L&D is and how to address it across government departments, a lack of relevant data and political tensions around its collection and disclosure.

This article contributes to this second strand of research and explores how national policy actors make sense of and attempt to govern L&D in the Pacific Island of Tuvalu. We argue that Tuvalu serves as a ‘most likely case’ for engagement with national L&D policy-making for several reasons. First, it faces a variety of climate change impacts including salt water intrusion, coastal inundation, drought, storm surges and cyclones which means it has been grappling with efforts to adapt and address L&D for more than a decade now (GoT, 2015b). Second, it

has played a sustained role in L&D negotiations both within AOSIS and the Least Developed Country (LDC) group, including playing a crucial role in advocating for a separate article on L&D in the Paris Agreement (Fry, 2016). Tuvalu has also been an active member of the WIM ExCom since its establishment. As such, this case study can leverage new empirical evidence to better understand how L&D as a governance problem originating in the global climate regime is translated into national processes (Roberts & Pelling, 2018; Vanhala et al., 2021).

We employ an interpretive policy analysis approach to gleaning understandings of L&D in the national policy landscape. This approach recognizes the geographically, temporally and socially situated nature of L&D and related policy responses and can thus be employed to analyse the manifestations of the national turn in L&D governance in different contexts. We draw on a systematic policy review and semi-structured interviews with national-level stakeholders to identify explicit mentions of L&D in official documents or interviewee's words. This allows us to capture *in situ* articulations of the concept and to situate it within the national governance landscape. We find that L&D in Tuvalu is developing as a 'complex governance system' with competencies and agency spanning across a variety of actors acting across multiple scales of governance. L&D has been mentioned in official documents since 2012 and is explicitly connected to abstract governance concepts (such as national sovereignty), specific policy domains (e.g. human mobility; infrastructure; protection of the Exclusive Economic Zone - EEZ) and relating to specific sources of funding (e.g. insurance). We find that L&D does not feature as a stand-alone policy domain nor is it explicitly distinguished from adaptation, but rather it is treated as a cross-cutting issue. This shows how the explicit distinction between adaptation and L&D within the UNFCCC and Paris Agreement processes does not necessarily translate into a neat separation of the two policy domains on the ground. Finally, we importantly highlight that national responses to L&D might involve action at the regional and international level beyond the UNFCCC, and call for future research to adopt a multi-scalar perspective to the study of L&D governance.

2. Methods and materials

We adopt an interpretive approach to capture *in-situ* understandings of what the L&D problem is and how actors attempt to govern it. Interpretive approaches to policy analysis assume that both the actors in a policy situation and researchers '*interpret issue data as they seek to make sense of a policy*' (Yanow, 2000). Consistently, policy words do not have – and cannot be analysed as having – 'objective' or univocal meanings. We suggest an interpretive approach is particularly useful when studying L&D policy-making, where an official definition is lacking at the UNFCCC level and the concept is left intentionally ambiguous and is lumped by some key actors into adaptation governance (Calliari, 2016; Hall & Persson, 2018; Vanhala & Hestbaek, 2016). This has led stakeholders involved in the UNFCCC process, including states, academics and practitioners, to develop different perspectives on what L&D means and how to address it (Boyd et al., 2017).

Against this background, we are interested in the way national policy actors understand and translate the (ill-defined) L&D global agenda into national policy processes. We expect this to vary from country to country and to be tailored to national circumstances and needs. While work on L&D within the UNFCCC brings together diverse policy areas like human mobility, slow onset events, NELs, and comprehensive risk management (CRM) approaches, they might not be equally relevant or developed at the national level. We thus investigate which policy areas are prioritized, why this is the case, and the type of policy instruments and measures national policy actors identify and develop. When taken together, these policy areas delimit the emerging and evolving L&D policy space at the national level in the Tuvalu context.

We reconstruct national-level approaches to L&D by combining two sources of data. We combine data from i) semi-structured elite interviews with national policy actors, with ii) a systematic policy review of national laws, policies, plans and guidance. Interviews (n = 12) were undertaken in Funafuti in September 2019. Research participants included individuals from the government, civil society organizations (CSOs), national and international non-governmental organizations (NGOs) and international organizations (IOs) (see Table 1 in the Supplementary Material). We reached beyond government officials because Tuvalu is characterized by a very strong participatory culture, and CSOs, NGOs and IOs engage with the government in a number of policy areas including sustainable development (Oppong, 2016). Yet, the majority of interviewees were from

the Department of Climate Change and Disaster (DCCD)², as the main organization involved in climate change-related policy processes. Interviewees in the DCCD included experts in different fields including vulnerability assessment, adaptation policies, and finance. Interviews lasted between 30 minutes and 1.5 hours. After gaining consent, 10 out of 12 interviews were recorded and transcribed. Interview data was then coded using grounded coding and analysed using NVivo software.

The systematic policy review was instrumental to outline the contours of the L&D policy space as embedded in national laws, plans and policy documents. We undertook an extensive analysis of documents related to laws, policies, plans and guidance. The review was undertaken in two phases: i) prior to the fieldwork to gain understanding of institutional and governance arrangements for disaster risk management, climate change adaptation and L&D; ii) after the fieldwork to expand the analysis to include policy areas and related documents that were referred to in the interview data. This iterative process allowed for expanding the pool of relevant documents to be analysed as our learning advanced. We included documents like laws, strategies, policies and plans related to the following domains: environmental management, climate change adaptation – including sectoral policies explicitly addressing climate change impacts – disaster risk management, and sustainable development. Laws were retrieved from the online Tuvalu Legislation Portal³ which collects all principal and amending Acts passed since 2008. To identify relevant strategies, policies and plans we consulted the Tuvalu country profile on the FAOLEX Database⁴ by the Food and Agriculture Organization (FAO), Prevention-Web⁵ by the UN Office for Disaster Risk Reduction (UNDRR) and on the Climate Change Knowledge Portal⁶ by the World Bank (WB). Finally, the plans, communications and reports produced as part of the country's commitments under the UNFCCC, UN Convention to Combat Desertification and the Convention on Biological Diversity were also included in the analysis. We identified a total of 28 relevant documents (see Table 2 in the Supplementary Material).

We then used content analysis to check for the use of 'loss and damage' as an expression in the 28 documents. We only searched for 'explicit manifestations' of L&D, while acknowledging that even those laws, strategies, policies and plans that do not mention the term might be considered relevant for L&D policy-making by national actors. Consistently, we included documents not mentioning 'loss and damage' when the link was made by our interviewees, like in the case of the 2015 Labour Migration Policy and the nexus between human mobility and L&D. As we are interested in the way national policy-actors make sense of L&D, we wanted to let them articulate what they meant in a bottom-up way, and we sought to avoid imposing any pre-conceived ideas we might have as researchers and/or bring to the interactions with research participants. Finally, we also drew on official statements by the Government of Tuvalu (GoT) in relevant regional and international fora. Table 2 in the Supplementary Material presents the full list of documents we identified and those that we analysed in depth as mentioning L&D (n = 6) or being referred to as relevant for L&D by our interviewees (n = 1).

3. Results: constructing L&D governance in Tuvalu

This section presents the emerging L&D policy landscape in Tuvalu, by outlining the types of policies that have been developed, implemented and funded to address L&D. It starts by outlining how key public sector stakeholders conceptualize L&D and understand the relationship with adjacent policy domains such as adaptation and disaster risk reduction (DRR). It then scrutinizes the way L&D is framed both in official documents and interviewees' words. We identify 3 policy areas in which the concept of L&D is consistently invoked: climate-induced human mobility, infrastructure investment and protection of the country's EEZ. We further find that insurance and risk transfer are recognized as a specific set of measures for acting on L&D.

3.1. The public sector's understanding of L&D and its relationship with adaptation and DRR

Evidence from our interviews reveals that public sector stakeholders find it difficult to distinguish between the adaptation and L&D domains and tend to adopt practical ways of looking at the issue. For instance, one interviewee noted: *'How are you going to really draw the line and say, "okay, I'm going to stop my adaptation here,*

everything else that comes after that, that's all loss and damage" (...) that's not very practical (...) what policy can look at is the broader picture' (Interviewee 12).

This reasoning is also exemplified by the way the GoT considers the inclusion of L&D in Tuvalu's forthcoming National Adaptation Plan (NAP). The foundation for the NAP process was laid in 2014 (Dumaru, 2019), and the resulting proposal was forwarded to the Green Climate Fund at the end of 2019 (GCF, 2020). Interviewee 12 explained: 'So the issue now [is that] people [...] just come and look at your document [and ask]"where is loss and damage?". But it is not necessary to have specific reference to loss and damage but rather, in the explanation of the plan, to say: we wanted to plan this as part of adaptation but also recognizing that [...] we need to plan how to mitigate those losses and damages once we get into that phase.' Another government official also recognized that the lack of evidence on L&D was one of the reasons why it was not included in the NAP, and why it was decided to 'look into the more vulnerable issues that need immediate attention'(Interviewee 11).

With respect to the relationship between L&D and the DRR policy domain, the GoT is seeking to pursue CRM approaches. Interviewee 12 continues: 'One of the things we are looking to do [is] comprehensive risk management (...) it is clear to us what the risks that are associated with both climate change and also disasters [are]. (...) So, in separating the two, it doesn't really matter whether it's disaster risk or climate change adaptation. What we focus on is 'What are the impacts?.'

This understanding of L&D as being situated along a continuum with adaptation, as well as an issue to be managed through CRM approaches, underlies the way L&D has been incorporated in the national policy landscape. In the next section we trace how the GoT has included L&D in the laws, policies and plans developed to respond to the impacts of climate change.

3.2. The L&D governance landscape

Climate change has featured as a priority for the GoT since the early 2000s, both as part of the wider national sustainable development agenda (Morioka et al., 2019) and as synergistic with disaster risk management imperatives. Table 1 provides an overview of the key laws, strategies and plans that constitute Tuvalu's climate governance architecture.

Table 1. Key laws, strategies and plans that constitute Tuvalu's climate governance architecture.

2005	Te Kakeega II (TK II) - National Strategy for Sustainable Development (2005–2015)	The Strategy explicitly mentions climate change as a key concern, and identifies salt-water inundation of pulaka pits, coastal erosion and flooding as the main impacts associated with climate change and sea level rise (GoT, 2005).
2012	Te Kaniva - Tuvalu Climate Change Policy (2012–2021)	Adopted under the impulse of TK II, the policy aims to 'protect Tuvalu's status as a nation and its cultural identity and to build its capacity to ensure a safe, resilient and prosperous future' (GoT, 2012b). The policy sets seven goals for scaling up the country's responses to climate change, with a dominant focus on adaptation and DRR.
2012	National Strategic Action Plan for Climate Change and Disaster Risk Management (2012–2016)	The plan operationalizes Te Kaniva's provisions of adaptation and DRR by identifying responsible agencies, implementation arrangements, indicative costing of implementation, monitoring and evaluation mechanisms (GoT, 2012a).
2014	National Disaster Management (Compensation Amendment) Act	The law partly modifies the 2008 National Disaster Management Act (GoT, 2008), by stating that 'Any person who has sustained any loss or damage from a disaster may request the government for assistance' (GoT, 2014).
2015	Climate Change and Disaster Survival Fund Act	The law establishes the Tuvalu Survival Fund (TSF) to support adaptation investments and recovery from climate change impacts and natural disasters (GoT, 2015a). A key objective is to provide communities with immediate support when a disaster strikes.
2016	Te Kakeega III - National Strategy for Sustainable Development (2016–2020)	The Strategy elevates climate change as its first strategic area as it 'poses the most serious threat to the security and survival of Tuvalu' (GoT, 2015c).
2019	Climate Change Resilience Act	The act translates the Paris Agreement obligations into domestic law and sets to 'build an effective climate change response and ensure long-term, just transition to a climate resilient and lower carbon economy and society' (GoT, 2019).

How does L&D fit into this architecture? L&D was mentioned as early as 2012 in the Tuvalu Climate Change Policy (GoT, 2012b). Under Goal 1, which focuses on strengthening adaptation actions, strategy 1.8 calls for defining *'appropriate insurance arrangements to address loss and damage from the impacts of climate change'* and suggests that the *'cost of re-building from the impacts of climate change are primarily borne by major GHG producing countries'* thus combining two potential L&D finance mechanisms – insurance and compensation – that are often seen as part and parcel of competing frames on L&D at the international level (Vanhala & Hestbaek, 2016). L&D is further mentioned under the related National Strategic Action Plan for Climate Change and Disaster Risk Management (2012–2016), which set the costs for operationalizing each of the climate change policy's goals, including L&D-related measures. Specific actions to fulfil Strategy 1.8 include *'investigat[ing] and establish[ing] appropriate insurance arrangements to address loss and damage from the impacts of climate change'* and seeking funding to fulfil this aim (GoT, 2012a).

It is worth noting that, following the mid-term review of the Te Kaniva and the final evaluation of the NSAP in 2017, the Cabinet endorsed the process for a new climate change policy (Te Vaka Fenua in 2017) and the parallel formulation of the NAP with responsibility lying with the DCCD. The new climate change policy has a number of priorities which again include L&D, together with issues related to security and sovereignty, the EEZ, and the legal protection of people displaced by climate change (Interviewees 1,2). The policy has not been endorsed yet, as there are disagreements on how to frame the issue of climate-induced migration and displacement (Interviewees 1,2,12).

L&D is identified in Te Kakeega III as a strategic stream and features a number of milestones for each year up to 2020. These include: i) identifying options for risk transfer and an insurance mechanism; ii) establishing and implementing a Survival Plan for Tuvalu, which would also address the issue of climate-induced migration; and iii) legalizing L&D by amending relevant legislation (GoT, 2015c). To the best of our knowledge, the 'Survival Plan for Tuvalu' has not been developed at the time of writing (or at least not in this form). The 2019 Climate Change Resilience Act has 'legalized' L&D to the extent that it includes *'Addressing loss & damage associated with climate change'* as one of its eight policy objectives. The Act states that the DCCD shall *'formulate, apply, and implement'* a National Climate Change Policy, and that strategies and plans to implement it should include *'secur[ing] funding for (...) issues related to loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events'*. L&D is also mentioned under section 17 on 'Precautionary approach', which states that the lack of full scientific certainty regarding the extent of adverse effects of climate change should not be used as a reason for not acting to prevent or minimize the potential adverse effects or risks *'include[ing] serious or irreversible loss or damage as a result of climate change'* (GoT, 2019).

Falling under Te Kakeega III, the Tuvalu Infrastructure Strategy and Investment Plan (TISIP 2016–2025) also explicitly refers to L&D. The TISIP aims at guiding infrastructure investments in the country and is linked to the national Asset Management Framework. L&D is mentioned in section 5 on 'Funding considerations'. Discussing recent development in climate change financing, the document highlights the instrumental role the GoT played in *'securing the inclusion of Article 8 on Loss and Damage'* in the Paris Agreement, and how this *'will ensure a rapid response to climate change disasters with international support'* (GoT, 2017a). The TISIP further discusses climate change impacts causing loss and damage to assets, and resilience measures to protect them.

This mapping of the L&D governance landscape (Figure 1) reveals that, rather than being a stand-alone policy domain, L&D is dealt with in connection with other policy domains. This supports the observation by Interviewee 12 that: *'loss and damage cuts across all sectors (...) we look at (...) the vulnerable sectors'*. In particular, it is explicitly connected to two main policy areas in official documents: i) climate-induced displacement (see Te Kakeega III); and ii) infrastructure (see TISIP). Interviews importantly allowed for identifying a third area associated with L&D, concerning the protection of Tuvalu's EEZ (Interviewees 9,12). Finally, Te Kaniva – which is the first document to mention L&D – highlights a specific set of measures for acting on L&D, namely insurance and risk transfer. The three domains and insurance are further explored below.

3.2.1. Human mobility

Te Kaniva, under Goal 7 on security and national sovereignty, included a call for an *'international policy for forced migration due to climate change'* (GoT, 2012b). The GoT intensified its activities in this direction from 2016

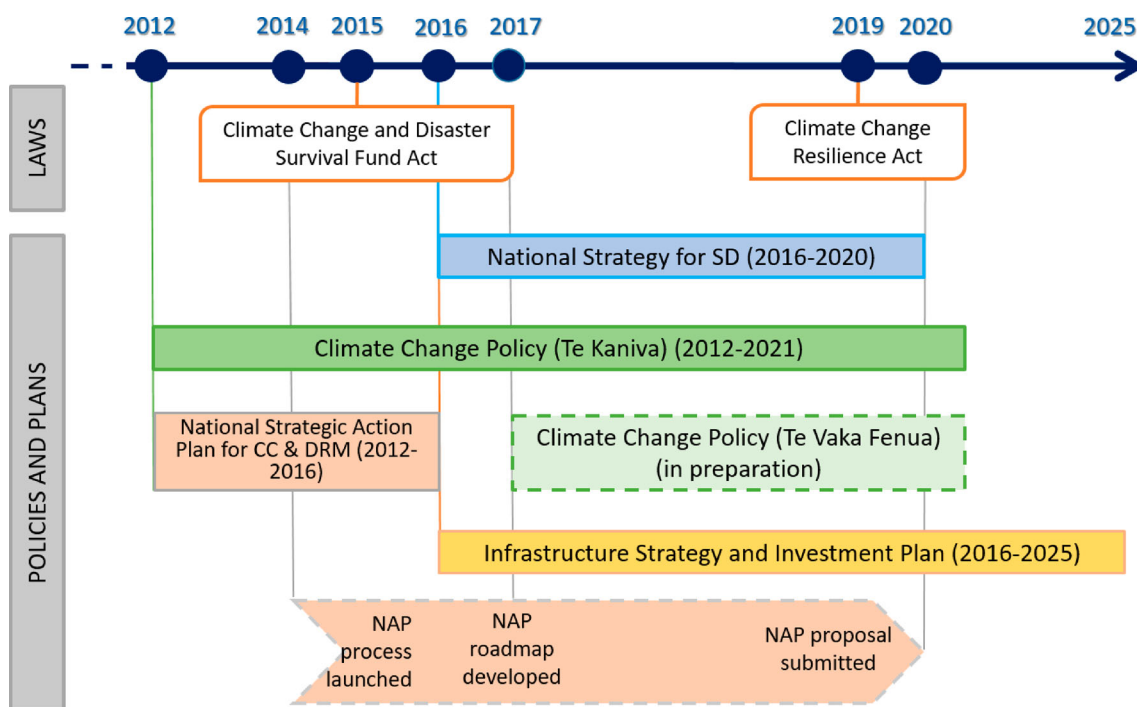


Figure 1. Laws, policies and plans that compose the L&D landscape (author's elaboration). Dashed lines indicate those policies and plans that had not been officially released at the time of writing.

onwards. At the High Level Signing Ceremony for the Paris Agreement, former Prime Minister (PM) Sopoaga pledged to seek 'a UN General Assembly resolution establishing a system of legal protection for people displaced by the impacts of climate change' (Tuvalu, 2016a). He further specified that the concern was 'not an indication that the people of Tuvalu want to migrate', but rather a humanitarian one, and that was 'one aspect of the Loss and Damage agenda' (ibidem). The intention was reiterated at the Istanbul World Humanitarian Forum later that year (Tuvalu, 2016b). Further, a draft resolution on 'Providing legal protection for persons displaced by the impacts of climate change' and calling for the development of 'an international legally binding instrument', was presented by GoT at the Seventy-third session of the UNGA in July 2019. The document recognizes that 'States have the primary responsibility to provide protection and assistance to internally displaced persons within their jurisdiction, as well as to address the root causes of the displacement problem, in appropriate cooperation with the international community' and encourages them 'to develop national laws and policies on displacement' (Tuvalu, 2019). Yet, it also ascribes to the international community, and in particular to Parties to the UNFCCC, a key role in 'tak[ing] concrete action to meet the protection and assistance needs of displaced persons and to contribute generously to projects and programmes aimed at alleviating their plight, facilitating durable solutions and supporting vulnerable local host communities'. As a high-level government official explained, the aim is to avoid people being put 'into a refugee camp' and instead being granted the right to have 'some kind of society that they can really live [in]', including 'a governing body', and the opportunity to 'practice their culture' and enjoy the 'kind of amenities that they used to have in their own location (...) like hospitals and all of that' (Interviewee 9). Several interviewees reiterated the need for international cooperation on the matter, either in the form of international law (Interviewee 1), regional policies (Interviewee 2) and/or by exploring bi-lateral arrangements (Interviewee 6).

The call for legal protection at the international level, clashes with the way climate-related human mobility has been framed in national policy documents. In particular, the 2015 National Labour Migration Policy (NLMP) states that, while not being 'a comprehensive document on climate change induced migration', it aims at equipping Tuvaluans 'with a better understanding of what opportunities exist abroad' (GoT, 2015d). The NLMP was

developed by the Ministry of Foreign Affairs, Trade, Tourism, Environment and Labour (MFATTEL) in partnership with the International Labour Organization's (ILO) Office for Pacific Countries, and was supported by the EU-funded Pacific Climate Change and Migration Project. The project, running from 2013 to 2016, focused on developing targeted national and regional policies to protect individuals and communities that are vulnerable to climate change displacement and migration; and to increase labour mobility opportunities for Pacific Islanders, through well-managed labour migration schemes (PCCM, 2014a). The project specifically promoted a 'migration as adaptation' discourse (Remling, 2020) by stating *'that migration is not only a last resort coping mechanism to climate change, but can also be a valuable strategy to help diversify and increase household income and thus improve resilience'* (PCCM, 2014b).

The inconsistency between the 'migration as adaptation' discourse embedded in the NLMP and the international protection instruments sought at the international level – as based on Te Kaniva – was flagged as one reason for the delay in the release of the new Climate Change Policy (Interviewees 1,2). As Interviewee 12 notes: *'In the labour migration policy, it has a different framing, and they have included climate change as one of the labour migration, which is to some extent, of course it's true, but the way it's been framed, it's not aligning to what we have proposed and agreed to by cabinet, to look at legal protection of people displaced by climate change'*.

3.2.2. Protection of the EEZ

Like many SIDS, the ocean, and in particular fisheries, provide a major source of income for Tuvalu. At the plenary session of the 2017 UN Oceans Conference, former PM Sopoaga described Tuvalu as probably *'the most fisher-dependent nation on earth'* and stressed how 40% of the country's annual National Budget derives from the ocean and tuna fishing licences in particular (Tuvalu, 2017). Tuvalu has an EEZ of around 900 km² (GoT, 2015c) where it enjoys the exclusive and sovereign rights to manage natural resources, and the country places much hope for future economic growth on the fishery resources contained in it. Yet, as sea level rises, low-lying countries will lose their land – which serves as the baseline from which the EEZ is calculated – and their EEZ will shrink as a result.

Not surprisingly, Te Kaniva identified the *'need to protect the EEZ'* as a key issue under Goal 7 on security and national sovereignty. In particular, it stressed the importance of securing the national EEZ *'as belonging to the Government and People of Tuvalu regardless of any loss of coastal areas or islands due to impacts of climate change such as sea level rise'* (GoT, 2012b). Action in this domain is advanced by the GoT within the United Nations Convention on the Law of the Sea (UNCLOS). When asked about the connection with L&D, a government official explained: *'The reasoning behind it is of course because it has linkages to that, but the UNFCCC cannot change our EEZ, it is the Law of the Sea that needs to change our EEZ or ensure that it is established. That's why it goes to the UNCLOS'* (Interviewee 12). The climate-proofing of EEZ has important implications even under a scenario where people will be forced to flee from Tuvalu. As another government official notes, the protection of the current EEZ will allow to *'stamp it as our waters and, even if we are to relocate at a later stage, we will continue to lay ownership on it'* and this will provide resources *'so that we can have our own way of developing our own people in the future. (...) we'd have that territory, a piece of territory'* (Interviewee 9).

Tuvalu has cooperated with several Pacific countries on EEZ-related matters since the early 1990s within the Pacific Islands Forum Fisheries Agency (FFA), and since 2001 in the context of the 'Pacific Islands Maritime Boundaries Project'. The project was originally established to assist Pacific countries to obtain greater certainty on the limits of their EEZs, thus enabling them to maximize rights over critical resources, such as fisheries (SPC, 2020). In the last decade, Pacific Island Forum (PIF) Leaders have increasingly drawn attention to the way sea level rise could erode existing rights on maritime zones (PIF, 2020). During a 2019 meeting in Tuvalu, PIF Leaders committed to a *'collective effort, including developing international law, with the aim of ensuring that once a Forum member's maritime zones are delineated in accordance with the UNCLOS, that the members' maritime zones could not be challenged or reduced as a result of sea-level rise and climate change'* (PIF, 2019). The recently launched 'Resilient Boundaries for a Blue Pacific project' (2020-2021) by SPC goes in this direction by aiming to assess and address the legal and technical implications of climate change on maritime zones (SPC, 2021).

The protection of maritime boundaries also features as a key theme for sub-regional fishery agreements in which Tuvalu participates. In March 2018, the signatories of the Nauru Agreement⁷ signed 'The Delap Commitment on Securing Our Common Wealth of Oceans – reshaping the future to take control of the fisheries' (ILA, 2019). Recognizing the *'threat to the integrity of maritime boundaries and the existential impacts due to sea level rise'*, they agreed to *'pursue legal recognition of the defined baselines established under the United Nations Convention on the Law of the Sea to remain in perpetuity irrespective of the impacts of sea level rise'* (PNA Leaders, 2018).

3.2.3. Infrastructure and coastal protection

Goal 4 of Te Kaniva specifically focused on developing and maintaining Tuvalu's infrastructure to withstand climate change impacts and aimed to deliver coastal protection following best practices appropriate for Tuvalu's situation.

The resilience of national infrastructure is discussed in the 2016 Infrastructure Strategy and Investment Plan (TISIP) (GoT, 2017a). The plan identifies climate change impacts causing *'loss and damage'* to assets and measures to protect them. Impacts include those associated with cyclones (wind, trees falling, waves overtopping land); storm surges (flooding, erosion); sea level rise (erosion, seepage); and temperature (health, asset failure). In the document, the term *'loss and damage'* refers to negative impacts to buildings, roofs, foundations, coastlines and assets like roads, power transformers, generators, and cables. A number of resilience measure are identified to address them, including enforcing building codes, elevating houses and equipping them with stronger roofs, land reclamation, beach nourishment, and improved design specificities for technological assets.

Coastal resilience, in particular, features as an urgent national priority for the GoT (Tuvalu, 2016c). With the support of UNDP, the GoT developed the Tuvalu Coastal Adaptation Project (TCAP), which was approved by the Green Climate Fund (GCF) in 2016 and kick-started in 2017 with a 7-year implementation period. The project received USD 36 million financing from the GCF and USD 2.9 million co-financing from the GoT, and aims to improve coastal protection in locations on the islands of Funafuti, Nanumea and Nanumaga. In the proposal presented to the GCF, the intervention was motivated by the need to contrast the *'existential threat'* posed by climate change in Tuvalu, and maintain *'the sovereignty of Tuvalu'* against a scenario where *'significant parts of the islands will be submerged'* and *'a nation-wide relocation is not considered an official solution to climate change'* (Tuvalu, 2016c). Land reclamation features as a key component of the project. In Funafuti, a first portion of land was reclaimed with governmental funds to make room for the Queen Elisabeth Park, where a convention centre that hosted the 2019 PIF was built. The TCAP project will add an additional 7.8 hectares. The project includes two additional streams of activities, namely strengthening institutions, human resources, awareness and knowledge for resilient coastal management, and establishing a sustainable financing mechanism for long-term adaptation efforts. TCAP has raised high expectations for the GoT, and has been described by the former PM Sopoaga as *'the pride of Tuvalu'* (TCAP, 2017). As Interviewee 5 notes: *'This is the biggest project for Tuvalu, and there's a lot influence from government. There's always pressure from them in approaching that, especially the implementation. Sometimes, it's hard to manage that expectations from them. (...) The Prime Minister is actually the board chairman. That's how important this project is for Tuvalu.'*

3.2.4. Insurance

Insurance arrangements have been recognized as a key domain for L&D action since the adoption of Te kaniva (GoT, 2012b). TK III (2015c) further included the identification of *'options for risk transfer and insurance mechanism'* among the milestones associated to the Strategy on Loss and Damage in 2016. The GoT started working on a dedicated climate change insurance facility in the Pacific in 2016, and shared the proposal with the Pacific Island country delegations at COP22 (Tuvalu, 2016d).

The proposed Pacific Islands Climate Change Insurance Facility (PICCIF) specifically targets climate change impacts both in the short and long term, and aims to go beyond a focus on natural disasters. In the concept note developed in 2017 (GoT, 2017b), the GoT suggests it would cover immediate impacts like cyclones, droughts, floods, coral bleaching, and longer term impacts like population displacement, ocean acidification,

changes in fish stocks, and sea level rise, leading to loss of land and territory. It would combine an index/parametric based risk transfer/insurance scheme to grant immediate pay-out when a threshold is reached, and an indemnity insurance to cover full damage costs after an event targeting public infrastructure and assets. The concept note highlights that the insurance scheme would align with Article 8 of the Paris Agreement on L&D, especially with respect to the areas of cooperation (f) on risk insurance facilities, climate risk pooling and other insurance solutions. Yet, the GoT also emphasized how *'insurance is not a universal remedy for all types of loss and damage caused by climate change'* and *'other supportive finance will be necessary'* (GoT, 2017b). The PICCIF is proposed to add to – and ultimately compete with – the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) established in 2007 to develop a comprehensive programme of disaster risk management and climate change adaptation in PICs with a focus on tropical cyclones and earthquakes/tsunamis (World Bank, 2015). The PCRAFI suffers from low participation rates, with only six out of the fifteen eligible countries involved. It is worth noting that Tuvalu only took part in the first pilot phase and the Solomon Islands dropped out when it didn't receive expected payments (World Bank, 2015). The GoT considers PCRAFI *'a top down model and that it does not properly respond to the climate change impact needs of Pacific Island countries'* because it deals with natural hazards and not climate impacts. It expressed concerns that *'the premiums are too high and the pay-out too low'* (GoT, 2017b). Tuvalu's proposal was endorsed by the Smaller Island States (SIS)⁸ Leaders meeting in 2017, which also agreed to establish a taskforce to elaborate on it. While the response of the wider Pacific Island Forum Leaders' was initially tepid (Newton Cain & Dornan, 2017), it was then agreed that the taskforce would report to the Forum Economic Ministers Meeting of the PIF. Several workshops and taskforce meetings have been held since 2017 and have allowed for refining the initial concept and agreement on a pathway to further develop it (SPREP, 2020).

4. Discussion

In employing an interpretive policy analysis approach, we can better understand the extent to which L&D-relevant policies have been developed, implemented and funded. By exploring the relatively uncharted waters of national approaches to L&D governance, we begin to remedy the gap left by scholarship's disproportionate focus on international governance of L&D (McNamara and Jackson 2018). As a 'most likely' case study for national level engagement with the L&D problem – given the disproportionate climate change risks the country faces and its long-term engagement in the L&D negotiations – this analysis reveals some lessons that will be of relevance to policy-makers in other contexts who are considering L&D governance. Our analysis shows that L&D has been mentioned in official documents since 2012 and in connection with specific responses (insurance) and policy domains (human mobility, infrastructure and the EEZ), and it is also regularly invoked in relation to questions of national sovereignty.

The identification of insurance schemes as a response to L&D is not surprising. Insurance has historically played a central role in discussions on adapting to climate change impacts (Linnerooth-bayer et al., 2019). AOSIS, and other actors like Munich Climate Insurance Initiative (MCII), developed proposals on the topic as early as 2008 (AOSIS, 2008; MCII, 2008). Given Tuvalu's engagement within AOSIS, these proposals might have played a role in shaping the GoT's decision to include insurance arrangements as a response to L&D in national policies. Indeed, the type of instrument mentioned in the 2012 Climate Change Policy implicitly draws on the philosophy of the AOSIS proposal by stating that it should be financed by major GHG producing countries on the basis of their *'historical responsibility'* (GoT, 2012b). Yet, as the proposal for the PICCIF shows, the GoT has moved forward in designing a mechanism that specifically responds to the country and other smaller island states' needs.

An original finding from our analysis is that L&D does not feature as a stand-alone policy domain nor is it explicitly distinguished from adaptation, but it is rather treated as a cross-cutting issue. This emerges both from the interviews, where policy actors consider the distinction between adaptation and L&D *'not practical'*, and the document analysis, which identifies explicit reference to L&D in domains like human mobility, infrastructure and the protection of the EEZ. This is different, for instance, from the way the Caribbean State of Saint Lucia has included L&D as a separate section in its National Adaptation Plan under the heading 'Limits

to Adaptation’ (Saint Lucia, 2018). We argue that L&D in Tuvalu is developing as a ‘complex governance system’, with competencies and agency spanning a variety of actors operating at multiple governance scales.

In terms of actors, the DCCD has a key role in climate change adaptation policy-making, and is thus in a central position to influence the way L&D is, and will be, embedded in national frameworks. This centrality can also be understood as stemming from a ‘knowledge competitive advantage’ deriving from the Director’s participation in both the L&D negotiations in the UNFCCC and in the WIM ExCom since its establishment. Yet, other national actors play a role in developing and enacting L&D-relevant policies. This includes, for example, the MFATTEL ‘who is responsible for delivering on the National Labour Migration policy; the Ministry of Public Utilities and the Ministry of Economic Development in the field of infrastructure; and the Ministry of Works and Natural Resources with responsibility for EEZ issues.’⁹ It is also worth noting that, in a LDC context, actors other than the government, like donors and UN agencies, can influence both the development and implementation of these policies (Rahman et al., 2016). A case in point is the development of the Labour Migration policy in the context of a EU-funded project, which resulted in the adoption of a ‘migration as adaptation’ frame that was later contested by the same GoT and paralyzed the adoption of the new climate change policy. With respect to CSOs or NGOs, we could not detect any significant role in L&D policy-making, probably owing to the fact that L&D is a relatively new concept for national actors. A reminder for future research is to draw attention to a diverse set of actors that can be influential in national approaches to L&D policy-making, both at the government level (including beyond the spheres of adaptation and disaster risk management) and beyond.

With respect to scales of governance, our study importantly reveals that national responses to L&D might involve action at the regional and international level. For instance, we found that the GoT seeks to deal with the issue of climate-induced migration by developing a system of legal protection within the UN, including, importantly, within institutions and venues other than the UNFCCC. Similarly, the protection of the EEZ is pursued within regional processes like the Nauru agreement and the international negotiations of the UNCLOS. Risk transfer tools like the PICCIF are developed in cooperation with smaller island Pacific states and in competition with the PIF. We suggest that while there is value in looking at the national level, this venture would be incomplete without taking into account what happens at the regional and the international scale beyond the UNFCCC. We thus call for a multi-scalar perspective to the study of L&D governance even when pursuing what we refer to as the ‘national turn’ in L&D research. This is important for two main reasons. First, there is increasing recognition that climate impacts are trans-boundary and propagate through different pathways, including bio-physical, financial, trade, and population movements (Hedlund et al., 2018). As such, they require international cooperation to be managed – as Tuvalu’s call for a system of legal protection for climate change-induced migration exemplifies. Yet, our paper suggests that even very territorialized impacts might need solutions at governance scales that transcend the domestic ones. For instance, we showed how the loss of territory (and thus of the EEZ) due to sea level rise in Tuvalu, one of the most isolated places on earth, is approached through action within the UNCLOS. This adds an interesting dimension to the current literature on multi-scalar governance (i.e. territorialized and ‘non-propagating’ impacts need international cooperation too), which could be explored by future research.

Turning now to the type of responses that the GoT puts in place to deal with L&D, our interviews reveal that it pursues a CRM approach. CRM designs a set of pre-emptive, planning and assessment, and contingency measures which are aimed at bolstering resilience and are applied in a concerted way (Hurlbert et al., 2019). It includes approaches like risk assessment, risk reduction, risk transfer, risk retention, as well as non-linear or transformational approaches, and the existence of an enabling environment providing the condition for effective implementation (WIM Excom, 2019). Our analysis shows how the GoT has devised a number of initiatives falling in these categories, including the NAP process and the TCAP project (risk assessment and reduction), the PICCIF and the Tuvalu Survival Fund (risk transfer and retention), and developed an enabling environment through the National Strategies on Sustainable Development (GoT, 2015a). These findings empirically support the observation by Roberts and Pelling (2018) that CRM can be a practical framing to address L&D for national policies.

5. Conclusion

This article provides the first in-depth analysis of the emerging L&D governance landscape in Tuvalu by focusing on the actors involved, the type of responses enacted and the scales at which action takes place. We find that L&D in Tuvalu is developing as a ‘complex governance system’ with competencies and agency spanning across a variety of actors operating across multiple scales of governance. An original finding that we present here is that L&D does not feature as a stand-alone policy domain nor is it explicitly distinguished from adaptation, but it is rather treated as a cross-cutting issue. This suggests that the explicit distinction between adaptation and L&D, as discussed and pursued by some Parties within the UNFCCC and the Paris Agreement, does not necessarily translate into a neat separation of these policy domains on the ground. Rather, national policy actors might understand and translate the L&D global agenda into national policy processes in different ways, and according to national circumstances and needs. As the Santiago Network for averting, minimizing and addressing L&D is being operationalized, understanding the policies that are already in place in different national contexts will be key to ensure that the technical assistance it provides is directed towards the solutions vulnerable countries identify and prioritize. Finally, while suggesting the emergence of a ‘national turn’ in research on L&D governance, we importantly highlight that national responses to L&D might involve action at the regional and international level beyond the UNFCCC, and call for future research to adopt a multi-scalar perspective to the study of L&D governance.

Future research should also move from the ‘how’ to the ‘why’ question, and shed light on the reasons for the inclusion of certain policy fields or approaches in the national L&D discourse and exclusion of others. It could explore the conditions under which national governments will be more likely to conceptualize L&D as an issue that is of national policy-making relevance. In particular, attention should be drawn to the way discussion within the UNFCCC and regional institutions influence domestic frames of the L&D problem and the solution space, and how national circumstances affect L&D frames both domestically and internationally.

Notes

1. This term is not meant to suggest a lesser role for international, regional and local actors, but rather is a call for research to pay attention to national level developments as well.
2. After the 2019 elections, the DCCD was renamed the Tuvalu Climate Change Department.
3. <https://tuvalu-legislation.tv/cms/>
4. <http://www.fao.org/faolex/en/>
5. <https://www.preventionweb.net/organizations/4702/view>
6. <https://climateknowledgeportal.worldbank.org/country/tuvalu/adaptation>
7. The Federated States of Micronesia, Republic of Kiribati, Republic of the Marshall Islands, Republic of Nauru, Republic of Palau, Independent State of Papua New Guinea, Solomon Islands and Tuvalu.
8. SIS include: Cook Islands, Federated States of Micronesia, Kiribati, Nauru, Niue, Palau, Republic of the Marshall Islands, and Tuvalu.
9. The current cabinet has slightly modified both competences and names of these Ministries. The MFATTEL is now the Minister for Justice, Communication & Foreign Affairs, and its competences on the environment have been attributed to the now called Minister for Public Utilities & Environment.

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