Tuvalu Rising Against the Tide: Sovereignty through the Loss and Damage Fund?

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**Picture 1 on the Title page shows one of Tuvalu's islands by © Juriaan Booij (2007)*

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Abstract

Tuvalu, an island state in the South Pacific, is facing severe consequences from climate change, particularly impacted by the continued sea-level rise. This makes the concept of Loss and Damage crucial for Tuvalu, with it being a representation of the irreversible impacts that defy adaptation or mitigation. While the recent agreement to create a Loss and Damage Fund under the United Nations Framework Convention on Climate Change (UNFCCC) offers hope, concerns persist about perpetuating climate colonial power dynamics. This thesis critically assesses whether and how the implementation of the Loss and Damage Fund shapes Tuvalu's levels of sovereignty over climate adaptation. For this, a thick description approach has been taken, whereby interviews with key stakeholders, including representatives from Tuvalu, NGO's, the UN, and government officials were conducted, and articles, reports, media, and blogpost were analysed. The findings suggest the fund can empower self-determination but may face difficulties due to international politics. Furthermore, it underscores the imperative need for a thorough exploration and effective implementation of non-monetary dimensions, including cultural preservation and indigenous practices, as they are pivotal to safeguarding Tuvalu's sovereign 'Fenua' identity. Questions also arise concerning the enforcement and safeguarding of Tuvalu's territorial rights through the fund. Tuvalu's proactive strategies and multifaceted approach vividly exhibit their resilience and determination, albeit the true extent of their influence hinges on responses from other nations and the global community. Finally, the thesis aligns these findings with existing literature and presents suggestions for future research in this domain.

Keywords: Climate Change, Loss and Damage, Loss and Damage Fund, Tuvalu, Sovereignty, Fenua, Self-Determination, Indigenous Practices, Climate Colonialism.

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Abbreviations

AOSIS ....*Alliance of Small Island States*
COP ....*Conference of Parties*
EEZ..*Exclusive Economic Zone*
GHGs...*Greenhouse gases*
IPCC ....*Intergovernmental Panel on Climate Change*
LDC ....*Least Developed Country*
NGO's ....*Non-Governmental Organisations*
SIDS ....*Small Island Developing States*
UN ....*United Nations*
UNFCCC ....*United Nations Framework Convention on Climate Change*
US ....*United States*

1. Introduction

1.1. Problem Description

The latest Intergovernmental Panel on Climate Change (IPCC) Assessment Report from 2023 warns of global temperatures surpassing the 1.5 degree °C threshold within the next fifteen years (Lee & Romero, 2023). This temperature increase will trigger a chain of consequences for various regions of the world, including heatwaves and resulting droughts, rising sea levels, stronger storms, and increased aridity, leading to various hazards and risks like floods, landslides, biodiversity loss, water scarcity, food insecurity, disease spread, and health problems, including heat-related illnesses and mental health challenges (Lee & Romero, 2023).

That being said, these consequences are not distributed evenly across society. For instance, countries emitting substantial volumes of greenhouse gases (GHGs) often experience fewer direct impacts compared to countries with lower GHG emissions (Lee & Romero, 2023). An example of the latter are Pacific Island states, such as the Maldives, Solomon Islands and Tuvalu, to name a few (Nations, n.d.), which are severely impacted and vulnerable to the effects of climate change (Lee & Romero, 2023).

The Loss and Damage concept, therefore, is of critical importance to these island communities. It refers to the effects of climate change that cannot be avoided through adaptation or mitigation measures (Pill, 2020), resulting in irreversible losses and damages to communities, economies, and ecosystems (Mechler et al., 2019). During the most recent climate conference, namely the Conference of Parties (COP) 27 in 2022 to the United Nations Framework Convention on Climate Change (UNFCCC), an agreement was reached to establish a Loss and Dame Fund. This fund allows for monetary support to states vulnerable to the effects of climate change (*Transitional Committee*, n.d.). Such a fund could be very influential by providing essential financial support and global recognition to help countries address the severe climate change impacts they face. However, it's worth noting that concerns have been raised about the potential for the Loss and Damage Fund to perpetuate ongoing unequal power relations. This could potentially allow donor nations to exert influence, set conditions, or shape priorities in ways that do not align with vulnerable nations' sovereignty and equitable needs (Naylor & Ford, 2023).

Tuvalu, like other atoll states, is widely recognised as highly susceptible to the impacts of climate change, often facing the grim prospect of submersion due to rising sea levels (Roy & Connell, 1991). As a result, Tuvalu has gained recognition as the 'canary in the coalmine' for climate change (Farbotko, 2010), drawing substantial journalistic attention in industrialised nations towards the nation's isolation and vulnerability, with climate change being the central focus (Besnier, 2009). Furthermore, Tuvalu's symbolic significance in Western climate narratives has been shaped not only by external perceptions but also by Tuvaluan leaders themselves during climate negotiations (Goldsmith, 2015).

Similar to the other Pacific Island states, Tuvalu used to be a former British colony (BBC, 2023). Colonial practices within Tuvalu, such as excessive use of land and deforestation, increased Tuvalu's vulnerability to the effects of climate change impacts, specifically in terms

of sea level rise (Wood, 2015) and therefore are partially responsible for the climate issues Tuvalu is facing nowadays (Parks & Roberts, 2006).

Also, the topic of sovereignty resonates deeply in Tuvalu. Concretely, Tuvalu only regained their sovereignty after their independence in 1978 (BBC, 2023), as will be elaborated on later in the thesis. Now the devastating impacts of climate change and the potential relocation to other countries (Smith, 2013) threaten Tuvalu's sovereignty again. Further, Tuvaluans sovereignty extends beyond the traditional view of territory and statehood but also includes their indigenous relation with the land in regard to their 'Fenua'[1] (Rothe et al., 2023) as well as their self-determination over climate adaptation processes (Frere et al., 2020).

Consequently, due to Tuvalu's' vulnerabilities to the impacts of climate change and the urgent need for action, the Loss and Damage Fund could be a measure to address these issues. Concretely, the fund could provide financial assistance to Tuvalu and thereby support Tuvalu in adapting towards the impacts of climate change. In that sense, the Loss and Damage Fund could support processes of sovereignty in Tuvalu. Hence, the topic of the proposed Loss and Damage Fund and what it does and mean to Tuvalu, has been chosen as a focus for this thesis. Thereby it will be examined whether and how the implementation of the Loss and Damage Fund shapes Tuvalu's levels of sovereignty over climate adaptation[2].

1.2. Research Gap

While there is a growing focus of research on the social and environmental effects of climate change on Pacific Island states (Barnett & Campbell, 2010; Lewis, 1990; Pernetta, 1992) as well as on their political and economic difficulties (Katzenstein, 1985; Keohane, 1969; Sutton & Payne, 1993), there is a significant lack of research exploring the significance and potential influence of island states in international agenda setting (Jaschik, 2014). Whilst some literature has briefly touched upon potential sovereignty losses of atoll nations (Barnett & Adger, 2003), a specific focus on Tuvalu is scarce.

According to Nurse et al. (2014), there is a pressing need for more comprehensive research into the socio-economic and political factors that contribute to the vulnerability of Tuvalu and other Pacific Island states to climate change, as well as how sovereignty can be supported within affected communities to promote more just and equitable climate policies. Furthermore, due to the novelty of the Loss and Damage Fund (Wyns, 2023), research on it is also notably limited. In addition, the concept of climate colonialism, which has been identified as a major barrier to achieving climate justice, has not been fully examined in the literature yet (Bhambra & Newell, 2022). Thus, the present thesis aims to contribute to these knowledge gaps.

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[1] 'Fenua' is an indigenous term referring to the Tuvaluan understanding of sovereignty which encompasses the people, land, sea, and community, highlighting the complex interdependence among these components (Stratford, 2013). More information about the Tuvaluan understanding of sovereignty and 'Fenua' can be found in chapter 3.
[2] More information on Tuvalu's background and its colonial past as well as the history of Loss and Damage will be explained in the second chapter.

1.3. Research Aim

The aim of this research is to critically analyse the relation between the Loss and Damage Fund and Tuvalu's sovereignty. Specifically, the thesis aims to explore how the fund may challenge or reinforce existing power dynamics and climate colonial structures, and to assess its effectiveness in promoting the agency and sovereignty of Tuvalu in the face of climate change. Sovereignty within Tuvalu has many facets and therefore it will be investigated whether and how the implementation of the new Loss and Damage Fund shapes Tuvalu's sovereignty concerning their self-determination over climate adaptation efforts, its support for the indigenous connection with their land, as well as the preservation of their territorial rights over Tuvalu.

The research will involve an examination of how the fund is outlined and discussed in official reports, media coverages, and interviews with key stakeholders, including representative from Tuvalu and international climate associations. By adopting a critical perspective, the thesis seeks to unpack the importance and definition of Loss and Damage for Tuvalu and their involvement in the implementation of the fund. Furthermore, it will explore the underlying power relations that shape the policies and practices surrounding the fund and their implications for Tuvalu's sovereignty. A particular emphasis will be placed on identifying potential underlying climate colonial structures. By contributing to these research gaps and assessing the role of the Loss and Damage Fund, the study aims to create a more in-depth understanding and potentially contribute to the development of more effective policies and initiatives that promote resilience, adaptation, and sovereignty for communities affected by climate change.

1.4. Research Questions

The main research question is '*In what ways does the implementation of the Loss and Damage Fund shape Tuvalu's levels of sovereignty in making decisions on climate change adaptation?*'

To answer this question, a few sub-questions have been established, mainly:

1. *How do Tuvaluans define Loss and Damage, and what do they identify as the most crucial element for Tuvalu in this debate?*
2. *Which Tuvaluan actors could be involved in the Loss and Damage Fund, and how might they impact the fund?*
3. *In what ways, if any, do climate colonial structures influence the implementation of the Loss and Damage Fund?*
4. *What are the conditions for the Loss and Damage Fund to support Tuvalu's levels of sovereignty in making decisions on climate change adaptation?*

1.5. Positionality Statement

Research is (un)consciously shaped through certain assumptions and perspectives on how the world works and how knowledge is constructed and understood (Mertens, 2015), where the basis often lies within Western and specifically Eurocentric worldviews, illustrating colonial structures (Held, 2019; Said, 1978; Smith, 2013). Agendas, systems, power structures, policies, and research also have to be decolonised, which includes challenging and changing colonial agendas as well as acknowledging and including marginalised and indigenous communities and their knowledge (McDowell & Hernández, 2010). These efforts are also a core element of this thesis, aiming to visualise Tuvalu's role in climate change discourse while respecting the islanders' views and perspectives. Nevertheless, it needs to be stressed that biases exist when addressing issues of colonialism in a non-Western nation as a White Western researcher and it is crucial to be aware of these biases when reading this thesis.

Concretely, my academic background and training have been primarily rooted in Western institutions, which can shape the way I approach research questions, methodologies, and analysis. This background may influence the questions I ask and the methods I employ. Additionally, my values, shaped by my upbringing and societal context, may affect how I perceive and interpret information. For example, I may have implicit biases that impact my understanding of particular cultural or social phenomena, potentially leading to misinterpretations.

My research aims to contribute to a decolonising of agendas, systems, and policies, particularly in the context of climate change discourse in Tuvalu. This reflects a commitment to addressing historical power imbalances and amplifying marginalised voices. I am not the only one engaging with this effort and build on literatures and works by many Pacific scholars who have for longer been engaging with this aim (Bordner, 2019; Davis, 2015; Hau'Ofa, 1994; Parks & Roberts, 2006; Weatherill, 2022; Williams, 2000).

I am also conscious of my privilege, including my privileged lifestyle. This privilege can affect my ability to connect with informants and understand their experiences fully. These aspects of my identity and background could potentially affect my relationships with informants during research. Being a White Western researcher may create power imbalances, where informants may feel compelled to share certain information or perspectives. It is crucial to be mindful of these dynamics and work to mitigate them throughout the research process.

Furthermore, my background, values, and privilege may influence how I interpret and analyse data. It is essential to engage in reflexivity and critically examine how my perspectives shape the research findings. To address these potential biases, I am committed to conducting this research with a deep awareness of power dynamics, ethical considerations, and cultural sensitivities. In recognising these elements of my positionality, I will strive to foster respectful and equitable relationships with informants, prioritise their voices, and ensure that the research contributes to the broader goal of decolonisation and the inclusion of marginalised perspectives in academia and policymaking.

1.6. Reading Guide

This thesis is structured into several chapters, each contributing to a holistic understanding of the research. In the subsequent Chapter 2, the historical context of Tuvalu is explored, including the colonisation of Tuvalu and its representation at conferences. Further, the evolution of Loss and Damage will be elaborated. Chapter 3 delves into the theoretical framework, drawing from established scientific literature to define and delineate crucial concepts like climate colonialism and sovereignty, central to this research. Chapter 4 elaborates on the research methodology, explaining the execution of the thesis through a thick description approach, the intricacies of data collection involving interviews and documents, data analysis methods, and a reflection on the interviews conducted. Chapters 5, 6, and 7 are dedicated to the presentation of the findings of the research. Chapter 5 provides a comprehensive discussion of Loss and Damage in Tuvalu, while Chapter 6 explores the barriers encountered in the implementation of a Loss and Damage Fund. In Chapter 7, strategies and approaches aimed at safeguarding Tuvalu are investigated. Chapter 8 offers a synthesis of key findings, discussing them with existing literature and recent developments, while also acknowledging the limitations of the thesis. Finally, in Chapter 9, a conclusion is given that addresses the research questions and offers recommendations for future research.

2. Background

2.1. Tuvalu

Tuvalu, a Pacific Island state comprising nine islands, is home to approximately 10,645 citizens over a total land area of 26 km², with the majority residing in the capital, Funafuti (Census, 2017). Due to its exceptionally low elevation, sitting only 5 meters above sea level, Tuvalu faces an existential threat (Calliari & Vanhala, 2022). The consequences of rising sea levels have begun to manifest in the form of coral bleaching, primarily attributed to increasing water temperatures and ocean acidification. Coral death not only results in diminished fish stocks and biodiversity but also leads to reduced growth of the atoll upon which the island depends, exacerbating coastal erosion with no natural mechanisms to counter it (Künzel et al., 2017).

As a result, Tuvalu is struggling to adapt to the Loss and Damage inflicted by climate change. The impacts range from tropical cyclones, which bring storm surges and droughts to coastal inundation causing saltwater intrusion. The latter leading to extreme freshwater scarcity (Calliari & Vanhala, 2022; Parks & Roberts, 2006). Additionally, environmental degradation, brought about by atmospheric changes, natural disasters, habitat loss, and diminished food security (Corcoran, 2016; Lala, 2015), compounds the threats to Tuvaluans' livelihoods (Baker et al., 2016; Falefou, 2017). This is causing worry among inhabitants about their island's ability to support their lives, leading some to contemplate relocation to safeguard their lives (Falefou, 2017; Kupferberg, 2021; Tabe, 2019) whilst again others are trying to find ways to stay and adapt in place (Farbotko, 2022; Suliman et al., 2019). Throughout these challenges, the people from Tuvalu want to safeguard their nation, heritage, and identity and wish to remain rooted in their land (Corcoran, 2016; Falefou, 2017).

The impacts of climate change are not limited to the well-being of Tuvalu's population but extend to the very infrastructure of the nation. The vulnerability of deteriorating shorelines to rising sea levels and intensified storms has left Tuvalu's infrastructure in dire straits (Parks & Roberts, 2006). In this context, Künzel et al. (2017) argued that long before the islands of Tuvalu are submerged, they could become uninhabitable. Coastal flooding and erosion, along with saltwater intrusion, threaten agricultural yields and contaminate groundwater resources. This could lead to Tuvaluans being more dependent on imports and foreign aid, which will be exacerbated by the islands' small size and remoteness (Künzel et al., 2017). The land degradation and contamination of drinking water sources raise the risk of vector-borne diseases, posing a threat not only to Tuvaluans but also to the country's tourism sector (Betzold, 2015).

Due to this susceptibility to climate change and rising sea levels, Tuvalu has been labelled as one of the 'sinking islands' (Smith, 2013). This narrative together with 'uninhabitability' (Künzel et al., 2017) is likely connected to deeply rooted yet problematic beliefs about the Global North's perceived superiority over the Global South, as well as an implicit assumption that the Global North holds the authority to oversee the affairs of the Global South. These existing dynamics of political knowledge relations can, in part, be attributed to the historical consequences of European colonisation across numerous regions. Thereby, the narrative of unavoidable uninhabitability, wherein the Global North exerts dominance over perspectives on the future of climate adaptation, serves as an illustration of colonialism (Farbotko et al., 2023; Whyte, 2017). In essence, the situation in Tuvalu underscores the enduring legacy of

colonialism and the ongoing struggle for sovereignty and environmental justice in the Pacific region.

Many Tuvaluans also reject the notion that their nation is inevitably destined to disappear beneath the rising seas and become uninhabitable. Rather they advocate for adaptive efforts to confront the changing environment, emphasising the preservation of both their country and their cultural heritage (Farbotko, 2022; Farbotko et al., 2023). This resistance to the narrative of a 'sinking island' reflects a broader movement among Pacific Islanders to assert their agency and challenge the perception that they are passive victims of environmental change (Barnett & Campbell, 2010). Furthermore, Brown et al. (2023) illustrated that the implementation of structural adaptation methods, such as land reclamation and island elevation, can be integrated into an adaptive pathway strategy to maintain islands against the rising sea levels. This highlights the capacity of atoll nations, like Tuvalu to say on their islands, offering a viable alternative to prevailing assumptions of 'uninhabitability' and relocation (Brown et al., 2023).

2.1.1. Colonisation in Tuvalu

The term 'Small Island Developing States' (SIDS) was coined in the early 1990s by the United Nations (UN) to describe a group of island countries that face significant development challenges, including vulnerability to the impacts of climate change. However, the term has been criticised in recent years for reinforcing a narrative of smallness and vulnerability, which overlooks the rich cultural and political histories of these countries and their potential contributions to global sustainability efforts (Barnett & Waters, 2016; Hau'Ofa, 1994). Also, in the case of Tuvalu, the classification as a SIDS has been criticised, as it implies that Tuvaluans are powerless to address their environmental challenges and are 'in need of development aid', from 'developed' nations and thus, must rely on the assistance of more powerful nations. Such a narrative illustrates how the Western world views Pacific Islanders as being insignificant (Hau'Ofa, 1994). According to Farbotko (2022), this discourse also perpetuates a narrative that portrays Tuvaluans as passive victims rather than agents of change in their own right. This underestimation of Tuvaluans not only illustrates their historical exploitation and colonisation but also their ongoing marginalisation by Western powers.

The legacy of colonisation also had a profound impact on Tuvalu's sovereignty. Concretely, from 1850 to 1875, Tuvaluans were being kidnapped and enslaved; and the spread of European diseases led to a decline in their population from 20.000 to 3.000 (BBC, 2023). Similar to the other pacific islands (Bordner et al., 2020), Tuvalu (former colonial name: Ellice Islands) was colonised by the British in the late 19th century and remained a British protectorate until it gained independence in 1978 (BBC, 2023). With their independence, Ellice Islands also changed their name to Tuvalu (BBC, 2023), or in its entirety 'Te Atu Tuvalu' (='cluster of eight') (Roberts, 1958), serving as a symbol for the departure from their colonial past.

Upon their independence, Tuvalu would have required significant foreign financial assistance (Paeniu, 1975 as cited in (Chappell, 2016)). However, they were left in a state of impoverishment and declared 'bankrupt' (Isala, 1983). Between 1901 and 1979, hundreds of Tuvaluans contributed to the phosphate mining on Bañaba (Shlomowitz & Munro, 1992), putting money into the Colony's Revenue Equalisation Reserve (Fairbairn, 1992).

Notwithstanding, Tuvaluans have been denied any money from the phosphate reserve funds (McIntyre, 2012). In 1987 the Tuvalu Trust Fund was established, through which Great Britain provided some assistance; however, according to Goldsmith (2012), this was not enough to warrant its tight control over Tuvalu. As a result, Tuvalu had been mistreated at the time of its secession, as well as the persistence and desperation of its leaders (Goldsmith, 2012). Despite all these challenges that Tuvalu faced after their independence and unfair treatment, some are still trying to relativise this cruel reality of colonialism. For instance, Grimble (1952) stated that colonisation was the greatest thing to ever happen to Tuvalu. Others indicated that in contrast to other Pacific islands, Tuvalu received their independence 'on a silver plate' (Jourdan, 1995).

Although Tuvalu gained independence from the British Empire in 1978, they remain a sovereign Commonwealth nation (Isala, 1983). As a result, its formal governance system and laws continue to be influenced by British law. Though some may have been amended, repealed, or replaced (Apinelu, 2022), they continue to rely on Western or non-indigenous understandings (Quanchi, 2017). The composed constitution is likewise shielded as a 'Western ideal' and as a culture forced on another culture (Paeniu, 1975 as cited in (Chappell, 2016)). Further, according to Chappell (2016), Tuvaluans lacked faith in their abilities and values after the separation because their histories were not discussed in schools. This changed and today, Tuvalu's culture is based on the island's collective customs and traditions, and each island has its own special commemorative holiday. However, remnants of colonialism and globalisation continue to impact Tuvalu's culture significantly. For instance, the Tuvaluan government still commemorates events that were influenced by colonialism, such as the King's birthday and Independence Day (Government-of-Tuvalu, 2023a). Media commentators, journalists, and documentary makers even depicted Tuvaluans as very attached to the monarchy and supportive of the British celebrations (Horner, 2004). However, these media presentations might also be influenced by colonial attitudes and stereotypes, illustrating a simplistic or inaccurate representation of Tuvalu's view.

Tuvaluans were also classified as the 'forgotten Polynesians' as they had no formal ties with other countries, such as New Zealand (Paeniu, 1975 as cited in (Chappell, 2016)). Tuvalu has declared a 'climate change refugee' status whereby 75 Tuvaluans migrate yearly to New Zealand (*New Zealand Ministry of Foreign Affairs and Trade*, 2021). This could be interpreted as New Zealand acknowledging Tuvalu's past and current obligations to support Tuvaluans' economic and social well-being, which colonial practices have impacted. However, this 'climate change refugee' status used to be defined as part of a 'labour programme' by the New Zealand Government (Biermann & Boas, 2010; Finin, 2002). This prompts the question to what extent this climate change refugee' status supports Tuvalu rather than acting as a labour scheme supporting existing power dynamics, by which New Zealand pursues the choices for Tuvalu, without tending to the underlying drivers of environmental change. Hence, Tuvalu's choice of migration is, notwithstanding, affected by the impacts of colonisation and extractivism in the Pacific, which prompted diminished socio-regular versatility and obstructions to development (Connell, 2012; Tabe, 2019; Teaiwa, 2014). This inconvenience of lines and rough abuse of Pacific Island groups by frontier organisations lastingly affected local area structure, associations with the land, culture, and language (Thornton et al., 2020).

Consequently, Tuvalu's previously defined climate vulnerabilities are not only due to its geographical location, but also due to colonial demands responsible for excessive land use and deforestation (Parks & Roberts, 2006). Moreover, as previously mentioned, Tuvalu has become an internationally recognisable symbol of the devastating effects of global warming caused by the emission of GHGs in industrial economies around the world. Therefore, based on Horner (2004), the United States (US) and England should bear the liability and pay remuneration for their unsustainable actions in regard to high GHG emissions. In addition, the US and Australia have infamously refused to reduce GHG emissions and ignored scientific claims of global warming (Goldsmith, 2005), which resulted in a lack of actions to contribute to sustainability, thereby negatively impacting Tuvalu and other island states' current vulnerabilities.

2.1.2. Tuvalu's Representation at Conferences

Tuvalu still faces challenges to its sovereignty, as its small land size and limited bureaucratic resources make it vulnerable to the influence of larger nations and multinational corporations. Additionally, as Farbotko (2022) notes, Tuvalu is often excluded from international decision-making processes that affect its environment and resources, limiting its ability to control its own affairs. Tuvalu does not individually participate in climate conferences, but somewhat similar to other island states is represented in the Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) by various negotiating blocs. Since 1986, Tuvalu has been in the UN's Least Developed Country (LDC) category (Attorney-General's, 1987), which allows them to have seats in the UN and thereby, their constitutions give local island councils some autonomy.

Moreover, next to the 57 other nations, Tuvalu is often represented as part of the previously mentioned 'Small Island Developing States' (Robinson, 2020). Another significant negotiation block, is the Alliance of Small Island States (AOSIS), which was shaped in 1990 after assessing the various vulnerabilities that low-lying island nations face due to climate change (Betzold et al., 2012). This alliance was shaped to reinforce the island voices in global negotiations, since while AOSIS individuals make up 20 % of the UN participation, their populaces make up just 5 % of the total population (Ourbak & Magnan, 2018).

According to Barnett and Campbell (2010), the identity of vulnerability was the foundation upon which AOSIS was initially founded. This was partly because it is beneficial to their cause and also because it is the language that is frequently utilised in the 35 international negotiations. Even though island leaders have devised ways to use the term, the idea of vulnerability still heavily relies on colonialism's legacy (De Souza et al., 2015).

Despite the institutional constrains, Tuvalu has exhibited agency in shaping its climate adaptation narratives, asserting its ownership over these critical narratives. Building upon research by Farbotko and Lazrus (2012), Stratford et al. (2013) and Suliman et al. (2019), Tuvalu's proactive engagement in defining its climate-related challenges and responses demonstrates its determination to take control of its own climate destiny. Tuvalu's agency in this regard has garnered significant attention, highlighting its efforts to assert its voice and agency in the global discourse on climate change and adaptation (Suliman et al., 2019). For instance, Tuvalu played a key role in advocating for a Loss and Damage Fund (Calliari &

Vanhala, 2022) and national projects such as the 'Digital Tuvalu' (explained further in the coming chapters) received worldwide media attention (Rothe et al., 2023). Thereby, contributing to safeguard their land and sovereignty.

2.2. Loss and Damage

An approach influencing the adaptation of the impacts of climate change and the return of sovereignty to Tuvalu can be seen in the discourse of Loss and Damage. Loss and Damage has evolved as a response to the inability of adaptation or mitigation efforts to address climate change (Pill, 2020). It includes the irreversible and residual impacts of climate change, such as loss of life, displacement, and damage to infrastructure, ecosystems, and cultural heritage (Mechler et al., 2019).

The history of Loss and Damage can be traced back to the first COP to the UNFCCC in 1991. There, Vanuatu, as a member of the AOSIS, proposed an international insurance mechanism to deal with damage coming from sea level rise (Kreienkamp & Vanhala, 2017) to compensate low-lying coastal developing nations that are most at risk (Mace & Verheyen, 2016). The proportion of each nation's share of the global gross national product (GNP) and their role in raising global CO_2 emissions would determine the country's contribution to this fund. Although mitigation was the primary focus, the AOSIS proposal was not included in any official decisions, and the term Loss and Damage nearly vanished in subsequent years (Kreienkamp & Vanhala, 2017). Then, in the 2007 Bali Activity Plan, Loss and Damage was alluded to for the first time in an official UN text, where Tuvalu proposed the creation of an 'international climate insurance pool to support the most vulnerable communities after climate-related disasters' (Teii, 2008 as cited in (Jaschik, 2014)). At COP 2010, the issue of Loss and Damage was first raised as a separate agenda item (Mechler et al., 2019) and in 2011 included in the Cancun Adaptation Framework (UNFCCC, 2011).

Following this, the 'Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts' was established at the COP in 2013 to address Loss and Damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change (Roberts & Huq, 2015). Therefore, Tuvalu also played a significant role in its creation. The mechanism established relevant parameters, with regard to Loss and Damage, such as the focus on non-economic damage, migration, and displacement, as well as the focus on least developed countries and developing countries being particularly vulnerable (Kreienkamp & Vanhala, 2017). However, developed nations, specifically the United States (US), were fighting the possibility of framing Loss and Damage as a matter of compensation (Goodell, 2015). This might have led to the Warsaw International Mechanism not being legally-binding, which complicated the matter of addressing compensation issues. The Warsaw International Mechanism was further strengthened in 2015 at the COP21 in Paris, where Loss and Damage became the third pillar of the UNFCCC in addition to mitigation and adaptation (Kreienkamp & Vanhala, 2017). Concretely, in the Paris Agreement the importance of averting, minimising, and addressing Loss and Damage associated with the adverse effects of climate change was recognised (Boyd et al., 2021). As AOSIS formed coalitions and pushed

for the establishment of a global Loss and Damage mechanism for many years, achieving this third pillar was truly significant for AOSIS (Kreienkamp & Vanhala, 2017).

In 2019, the UNFCCC held a conference on Loss and Damage in Bonn, Germany, highlighting the urgent need to address Loss and Damage, particularly in vulnerable developing countries. The conference called for increased funding and support for initiatives to reduce Loss and Damage. It emphasised the importance of involving local communities in decision-making processes related to climate change adaptation and mitigation (UNFCCC, 2019). Insurance schemes have also been launched to protect vulnerable communities from the impacts of climate change, but their effectiveness remains a subject of debate (Mortreux et al., 2020).

During the most recent 27th COP to the UNFCCC in 2022, an agreement was reached to establish the Loss and Damage Fund to assist vulnerable developing nations in addressing climate-related Loss and Damage. Specifically, as a result of COP27, a Transitional Committee was formed to provide recommendations for adopting the Loss and Damage Fund at COP 28. These recommendations will address critical aspects such as creating the fund's structure and governance, defining funding arrangements, finding funding sources, and ensuring coordination with existing initiatives. (*Transitional Committee*, n.d.). Before these recommendations are provided at COP 28, the committee will undergo five meetings and two workshops (*Meetings of the Transitional Committee and related workshops and events*, 2023). According to Wyns (2023), this 'ground-breaking' agreement could be seen as a 'climate justice milestone' (Wyns, 2023). Fundamentally, the fund could have an enormous impact on Pacific Island states, in terms of helping 'governments rebuild homes, hospitals and roads, avoid new debt burdens, and provide social protection to help communities bridge crises' (Teresa Andersona as cited in Wyns (2023)).

However, there are also concerns about the new Loss and Damage Fund concerning the fund's scale and allocation, as it may remain inadequate to address the massive damages already incurred and anticipated losses in the forthcoming future (Niyitegeka, 2023) especially for the most vulnerable countries such as Pacific Island states like Tuvalu. Additionally, critics argue that any Loss and Damage Fund should not only address economic loss but also consider non-economic losses, such as social, cultural, and ecological losses, which are equally valuable for affected communities (Mechler et al., 2019). Regarding Tuvalu, such non-economic losses could be forced displacement and migration, culture, and identity loss (due to forced migration) and biodiversity loss. It is questionable to what extent the Loss and Damage Fund will consider such non-economic losses. Further, it is unclear whether the fund will address only extreme weather events or also slow onset events (Niyitegeka, 2023). Moreover, discussions remain whether the fund is expected to come via grants as critics worry that it might come in loans instead (Richards et al., 2023). Primarily due to the novelty of the fund, there is still a lot of uncertainty regarding these topics.

Another concern is that the proposed fund should be transparent, inclusive, and accountable to avoid exacerbating existing power imbalances and perpetuating colonial structures within climate policies (Mechler et al., 2020). This leads to the worry that the fund may not prioritise the voices and experiences of the most affected and marginalised communities and may fail to address the root causes of Loss and Damage, which are often rooted in global inequalities and historical injustices (Naylor & Ford, 2023). Therefore, any proposed Loss and Damage Fund

needs to be designed and implemented in a way that genuinely supports affected communities, upholds their sovereignty, and addresses the systemic causes of climate injustice.

The role of insurance in addressing Loss and Damage brought on by climate change is also a topic of ongoing debate. There is a worry, that insurance systems will be a part of the new fund. Insurance is often criticised for being profit-driven and lacking sensitivity to the particular difficulties developing nations face. Further, reliance on insurance could perpetuate existing power dynamics and inequalities, particularly for Pacific Island states like Tuvalu, disproportionately affected by climate change impacts. Therefore, there is still much work to be done to address Loss and Damage, and many vulnerable communities continue to suffer the impacts of climate change with little support (Mechler et al., 2019). The Loss and Damage discourse remains a contentious issue, with debates continuing over the scope of the problem and the most effective ways to address it (Niyitegeka, 2023).

3. Theoretical Framework - Towards a Climate Colonial Critique

The following section provides a foundation for understanding the interconnectedness of climate colonialism and sovereignty in the context of Tuvalu to enable a comprehension of ongoing (power) dynamics.

3.1. Colonialism

Colonialism lies in a practice of supremacy, encompassing the domination of one group by another (Frankema, 2010; Kohn & Reddy, 2023). Historical colonial practices were characterised by the exploitation of natural resources and claiming of wealth through economic exploitation in colonised territories (Barbier, 2010). Scholars like Nixon (2011) and Atiles-Osoria (2014) have emphasised that colonial powers primarily aimed to extract resources for their enrichment, extending their influence over geographic regions. This practice often resulted in environmental degradation and community devastation (Atiles-Osoria, 2014; Nixon, 2011). Ghosh (2021) further delved into these practices, explaining how colonial powers' quest for development and wealth resulted in the exploitation of humans, animals, and non-living beings, causing the loss of livelihoods and the destruction of natural resources.

In that sense, as has been posed by Amitav Ghosh (2021) the generative roots of the evolving climate change could be traced back to these colonial dynamics and practices. Within that line of reasoning, it is emphasised how the prominent Western (climate) policies that have produced significant climate change (Pizzini, 2006) result from capitalist growth, which has partially been built upon colonialism (Ghosh, 2021). Concretely, European powers exploited the resources of their colonies to support their own economies. Next to the destruction of natural resources, colonisers also destroyed the indigenous communities and the world's understanding of the connection between the environment and humans (Ghosh, 2021). In the context of Tuvalu, colonial practices in the form of deforestation and excessive land use (Parks & Roberts, 2006) have contributed to the vulnerabilities Tuvalu faces concerning climate change today, specifically in terms of sea level rise (Wood, 2015). Further, as described in chapter two, indigenous practices and Tuvaluans culture were suppressed during colonial times (Chappell, 2016; Government-of-Tuvalu, 2023a), illustrating the influence of colonial practices on the islands identity. Concretely, in regard to Tuvalu's governance system and laws, the British Empire focused mainly on Western understandings, thereby, suppressing indigenous understandings and practices (Quanchi, 2017). This absence of Tuvaluan histories and indigenous concepts in the government (Quanchi, 2017) and schools also diminished Tuvaluan's self-confidence in their own capabilities and cultural worth (Chappell, 2016).

3.1.1. Neo-Colonialism

Contemporary forms of oppression and subordination of former colonies by developed countries have been defined as 'neo-colonialism'. According to Kwame (1965) this new form of colonialism signifies a situation where formerly colonised nations gain political independence but remain economically and culturally reliant on their former colonisers, often due to local elites serving as intermediaries. This perpetuates practices resembling formal colonialism, such as heavy dependence on resource exports, without direct accountability from

the former colonial powers (Simal-González, 2019). As explained in chapter two, after Tuvalu's separation from the United Kingdom, they remained part of the Commonwealth (Isala, 1983) and their governmental, legal (Apinelu, 2022), and school systems (Chappell, 2016) as well as certain holidays (Government-of-Tuvalu, 2023a) are influenced by the British Empire. Though this slowly changes (Apinelu, 2022), as Tuvalu places a larger importance on indigenous knowledge and practices (Chappell, 2016; Tuvalu, n.d.).

The domination and exploitation of countries through environmental policies by developed countries and multinational corporations have also been identified as a novel form of colonialism (Wood, 2015). Concretely, Shiva (2018) argues that this new form of 'neo-colonialism' reinforces existing power structures. It perpetuates inequalities rather than addressing the root causes of climate change and its impacts on vulnerable communities (Ghosh, 2021). Concretely, as critiqued by Ghosh (2021) global climate negotiations often fail to recognise that the neoliberal capitalistic condition is based on favouring/ empowering exploitative Westerners and creating boundaries and issues for marginalised communities to overcome these conditions.

While some researchers argue that past colonial practices also play a role in contemporary forms of colonialism, as they shaped the existing power dynamics (Bakker, 2010; Nixon, 2011; Sultana, 2022), Atiles-Osoria (2014) argues that colonial extraction practices (Mattei & Nader, 2008) should be seen as distinct from modern forms of colonialism. He argues that the former involves imposed and violent strategies that do not benefit the colonised party. At the same time, the latter operates as an ideological system of (environmental) exploitation with the consent of the influential individuals within the colonised nation. Thereby, the colonisers guarantee rewards like modernisation or development in return for exploiting natural and mineral assets (Atiles-Osoria, 2014). This form of colonialism often indicates the exploitation of renewable natural resources and refers to the manufacturing process's release of toxic waste into the earth, water, and air (Concepción, 1988 as cited in Atiles-Osoria (2014)). Consequently, there is no consensus on the use of the terms or different definitions yet.

3.1.2. Climate Colonialism

Within the environmental framework of contemporary colonialism, a multitude of terms have surfaced, such as eco-colonialism[3], environmental colonialism[4], green colonialism[5], and climate colonialism (Ramirez et al., 2023; Stoll, 2018; Whyte, 2017; Zografos & Robbins, 2020). While these terms are used interchangeably, each highlights different aspects of how

[3] Eco-colonialism can be defined as the manipulation of environmental concerns by individuals in developed nations to exert supreme power over citizens of developing nations, resulting in unequal relationships and significant changes in social, political, and economic structures, with a primary emphasis on the exploitation and degradation of ecosystems and natural resources (Babie, 2014).

[4] Environmental colonialism encompasses the multifaceted ways in which colonial practices have impacted the natural environments of indigenous populations, as European expansion led to ecological disruptions through the introduction of foreign markets, invasive species, diseases, and exploitation of natural resources, ultimately undermining the ability of native communities to maintain their traditional cultures and ecosystems (Stoll, 2018).

[5] Green colonialism encompasses the strategical utilisation of the preservation of ecological and natural resources to justify colonialist policies and practices, all serving the interest of influential entities (Ramirez et al., 2023; Shiva, 2018).

colonial power dynamics have shaped environmental and climate issues. For the present thesis, the term climate colonialism, alluding to the power systems of the current global climate regime, which promote the interests of the wealthy and powerful nations over those of the Global South, illustrating inequalities and injustices (Bhambra & Newell, 2022), has been chosen. Zografos and Robbins (2020) further elaborates that climate colonialism refers to the reinforcement or broadening of control over less influential nations and their populations by means of efforts that amplify the external exploitation of these countries' resources or undermine their sovereignty while addressing climate change (Zografos & Robbins, 2020).This specific concept was chosen for the present thesis, as it highlights how climate change mitigation and adaptation strategies can be used to reinforce global power hierarchies and perpetuate forms of economic exploitation and political subordination. Hence, it can help identify how developed countries and corporations maintain power and control over developing countries, such as Tuvalu in the context of climate change, and thereby, further exacerbate inequalities. However, as the different concepts of eco-colonialism, environmental colonialism, green colonialism, and climate colonialism, are often used interchangeably, they will also be considered during the document analysis, in case they relate to the definition of climate colonialism.

According to Sultana (2022) climate colonialism persists from historical colonial practices to modern forms of extractivism and neo-colonialism. Thereby, the term not only describes the ways in which developed nations and corporations exploit the resources and peoples of less developed nations, also in the context of climate change (Bhambra & Newell, 2022), resulting in historically exploitative overdeveloped economies (Sultana, 2022) but also to the power dynamics in climate politics that lead to the control over setting agendas, approaches and belief systems to maintain these structures (Roberts & Parks, 2009; Warlenius, 2018).

Tandon (2021) criticises that rather than those who have experienced long-term climate devastation, often white men from the Global North dominate climate discussions. Similarly, Davis and Todd (2017) argue that this perpetuates the whitewashing of academic and environmental discussions, resulting in narratives of a climate apocalypse that oppress colonised communities. 'Lower income groups' and marginalised communities have fewer possibilities to participate in decision-making processes (Meikle et al., 2016). This can also be seen in the example of Tuvalu, as they are often excluded from international decision-making processes (Farbotko, 2022), such as climate negotiations, which are still dominated by Western narratives and climate finance schemes. For instance, the proposed displacement of local communities due to climate change (Sultana, 2022) illustrates a Western proposal, which has been largely rejected by the communities themselves (Farbotko et al., 2023; Whyte, 2017), leading to environmental and social injustices while harming marginalised communities (Sultana, 2022). Hence, such Western approaches are the basis of the adaptation pathways for island states such as Tuvalu, whereby indigenous knowledge and understandings are often ignored, and hence, could also be seen as products of climate colonialism.

According to Bhambra and Newell (2022), climate colonialism, as a contemporary manifestation of historical colonial practices, perpetuates unequal power dynamics that facilitate the dominance of industrialised nations. This abuse of environmental concerns allows dominant nations to prioritise their economic, ideological, and political interests (Edwards,

2000), causing a potential loss of sovereignty for vulnerable, developing states. The resulting asymmetrical relationships disrupt political, social, and economic frameworks, leading to decreased security, health risks, and resource scarcity, predominantly affecting marginalised communities in the Global South (Babie, 2010).

As a result of previous climate colonial practices and the ongoing atmospheric colonisation (Malm & Warlenius, 2019), it has been argued that the West owes the Global South a climate debt (Abimbola et al., 2021). In the case of Tuvalu, the country is an island nation that contributes very little to global GHG emissions. Yet climate change disproportionately affects it, such as rising sea levels and more frequent and severe tropical storms (Roy & Connell, 1991; Wood, 2015). These climatic impacts are also partially due to past exploitation by Western nations (Parks & Roberts, 2006). Therefore, Abimbola et al. (2021) argue that the Western countries with historical emissions should pay for the damage in affected countries in the Global South. However, critics argue that the lack of recognition of (past and present) colonial practices as well as the Western domination of climate agendas and discussions (Roberts & Parks, 2009; Warlenius, 2018) still hinder such progress in international climate justice (Newell et al., 2021; Sultana, 2021).

In conclusion, climate colonialism is argued to be deeply rooted in historical practices of exploitation. Many scholars highlight that it continues to manifest in modern forms of colonialism, wherein developed nations and corporations exploit resources and people in less developed nations, especially in the context of climate change. This perpetuates overdeveloped economies and power imbalances in climate politics, where decision-making remains dominated by Western narratives, side-lining the experiences and voices of the most affected communities. The persistence of climate colonialism raises concerns about the loss of sovereignty and increased vulnerabilities, particularly among marginalised communities in the Global South, such as Tuvalu. As the impacts of climate change disproportionately affect these regions, the concept of climate debt, gains relevance, suggesting that historically emitting Western countries should be held accountable for the damage caused. However, overcoming the power dynamics and addressing historical injustices within international climate discussions remains a significant challenge.

3.1.3. Decolonisation

Within these discussions around colonialism, neo-colonialism, as well as climate colonialism, the need for decolonisation approaches is frequently mentioned. Decolonisation constitutes a multifaceted and sweeping process that transcends the mere dismantling of colonial empires, encompassing profound global shifts in territorial governance, economic integration, the recognition of human rights, and the revaluation of prevailing power structures, thereby reshaping historical narratives and international paradigms (Hopkins, 2020). To decolonise agendas, systems, power structures and policies, research also has to be decolonised, which includes challenging and changing colonial agendas as well as acknowledging and including marginalised and indigenous communities and their knowledge (McDowell & Hernández, 2010).

As mentioned in the positionality statement, this thesis aims to contribute to the broader goal of ‘decolonisation’. However, the concept of decolonialisation, while holding intrinsic value in addressing historical injustices and power imbalances, has not been immune to appropriation by privileged and predominantly white communities. This appropriation often dilutes the original intent of decolonisation, leading to a potentially tokenised approach, which involves making symbolic gestures that may appear to address decolonisation without genuinely addressing the deeper issues it aims to confront (Mbembe, 2001). In the context of this thesis, which centres on the examination of climate colonialism, it is crucial to recognise these critical aspects. Just as decolonisation can be co-opted for superficial purposes, the discourse surrounding climate colonialism must remain vigilant against misappropriation or the reinforcement of existing power structures. By acknowledging and addressing these critical dimensions through the incorporation of indigenous concepts and understandings as well as indigenous scholars and interviewees, the thesis aims to contribute to a more nuanced and inclusive dialogue surrounding climate adaptation, and sovereignty in the Global South.

3.2. Sovereignty

Sovereignty, a multifaceted concept, has profound implications in the ongoing discourse of climate colonialism. Generally speaking, sovereignty signifies the inherent right of a state or community to self-governance and control over its territory, resources, and political decisions (McGregor & Christie, 2021). In the context of climate change, sovereignty takes on a unique dimension, particularly for low-lying island nations like Tuvalu. These states seek to assert their control over natural resources, territorial waters, and economic development, which is essential for their survival in the face of impending climate-induced threats (Barnett & Adger, 2007; Chan, 2018; Hau'Ofa, 1994; Stratford, 2013). Consequently, these nations face a dual challenge: not only are their land and sea territory threatened by climate change, but their self-determination and political independence are also at risk (Frere et al., 2020).

3.2.1. Historical Meaning of Sovereignty in the Westphalian Context

Historically, sovereignty, especially in the context of Westphalian traditions, was perceived as a concept deeply rooted in a nation-state’s territory. The Westphalian model of sovereignty encompassed three fundamental features: a defined territory, exclusive control over the exercise of power, and a collective community that self-identified as a nation (Albert et al., 2001). This traditional understanding of sovereignty associated it with a physical territory characterised by internationally recognised borders. However, environmental, and societal changes challenged the conventional Westphalian concept of statehood (Albert et al., 2001; Malm & Warlenius, 2019), prompting the emergence of deterritorialisation and reterritorialisation processes. For example, the dispersion of authority across various levels of governance, the rise of collective identities disassociated from geographical boundaries (Rothe et al., 2023) or the emergence of new territories, as seen in the establishment of Exclusive Economic Zones (EEZ) in ocean space (Lambach, 2020). This dynamic landscape illustrates the interconnection between concepts of territory and sovereignty (Krasner, 2000).

The focus on statehood predominantly revolving around this singular Western conception of sovereignty is subject to criticism, as it fails to acknowledge the dynamic and evolving nature of sovereign statehood (Agnew, 2005). Therefore, McConnell (2010) calls for a shift in the perception of sovereignty as absolute and indivisible. These ongoing debates about changing forms of statehood contribute to understanding the diversity of statehood beyond the Western model (Stratford et al., 2013), emphasising the need to reaffirm sovereignty constantly (Rothe et al., 2023). While certain displays of sovereignty, such as diplomatic ceremonies, tend to follow standardised and established patterns, alternative expressions of statehood are notably context-dependent, rooted in local indigenous understandings, cultures, practices, and environments. These alternative expressions foster a diverse array of statehood manifestations and embody the concept of 'lived sovereignty' (Srivastava, 2022). Thereby, underscoring that sovereignty is not limited to formal structures but is embedded in the daily lives and practices of a community.

The literature on postcolonial island regions has illustrated how statehood in the Pacific is shaped by indigenous understandings, cultures, and interconnection between culture and land (Suliman et al., 2019). It is this intricate connection between the land and its people that defines identity, installs a sense of responsibility, and upholds the right to self-determination (Chao & Enari, 2021). Consequently, the understanding of sovereignty extends beyond the traditional notions of self-determination and territorial control and must also encompass the indigenous understandings that have evolved in these regions.

3.2.2. Tuvalu's Unique Interpretation of Sovereignty: The Role of Fenua

Tuvalu's conception of sovereignty is intertwined with the indigenous concept of 'Fenua,' presenting a unique perspective that transcends conventional Western definitions. 'Fenua' emphasises a relational comprehension of territory and statehood (Rothe et al., 2023) and thereby encompasses the physical land as well as embodies the collective of people who inhabit it (Farbotko & McMichael, 2019; Farbotko et al., 2016). In essence, Tuvalu's conception of sovereignty, intricately tied to the indigenous notion of 'Fenua,' offers a distinct perspective that highlights a relational understanding of territory and statehood, thereby encompassing both the physical land and the collective community that resides within it (Kitara, 2019). Furthermore, in Tuvalu's indigenous perspective, the land and ocean hold a spiritual significance, as both are considered as spiritual entities that engage in a meaningful dialogue with the people. In return, it is the responsibility of the people to safeguard and care for the land and ocean. Any threat to this 'territory' extends far beyond the physical space, encompassing the land, the ocean, the people, and spiritual heritage, all inseparably interconnected within the profound Tuvaluan 'Fenua' philosophy (Rothe et al., 2023). Consequently, Tuvalus notion of sovereignty can be understood as a relational and dynamic concept.

'Fenua' shapes the sovereign identity of Tuvaluans, thereby preserving the notion of a stable relationship between the 'people' and the 'island'. Simultaneously, it underscores the relevance of mobility and migration, as the people from Tuvalu may need to move or leave their homeland due to environmental changes. This challenges the traditional definition of territory and how it's connected to its people. Recognising this coexistence of stability and mobility can serve as

both a conceptual and material resource, enriching the transformation of legal policy structures and systems through a cultural understanding (Stratford, 2013).

Moreover, 'Fenua' plays an essential role in linking identity to place and community, providing a unique biographical context for the location of identity within specific parts of an island, such as valleys or bays. It effectively combines the ideas of community, people, and place, emphasising the intricate interdependence of these elements (Stratford, 2013). On each of Tuvalu's islands, the individual communities hold yearly celebrations known as feasting and 'faatele' – communal events featuring costume, music, dance, and percussion competitions among villages. The national government designates these celebrations as public holidays for 'Fenua' communities, influencing working days based on one's island community affiliation (Stratford, 2013).

Understanding Tuvalu's unique interpretation of sovereignty, mainly through the lens of 'Fenua' and indigenous perspectives, holds predominant significance in the context of Loss and Damage. This understanding is crucial because it fundamentally shapes the way Tuvalu and similar island states perceive and respond to the challenges posed by climate change. To effectively address Loss and Damage, it is imperative to acknowledge the indigenous concepts that underpin Tuvalu's sovereignty. This approach not only respects their unique identity and statehood but also paves the way for comprehensive strategies to address Loss and Damage while safeguarding Tuvaluan's self-determination, preserving their cultural and environmental heritage, including the concept of 'Fenua,' and protecting their territorial rights, which are intrinsically linked to their identity and sovereignty.

The immediate threats of land degradation caused by rising sea levels not only jeopardise the livelihoods and sovereignty of Tuvaluans but also pose a significant risk to their 'Fenua.' Moreover, the cherished Tuvaluan value of 'Loto fenua' (island loyalty) is equally in peril, as noted by Saddington (2023). To address these challenges, it is crucial to prioritise the preservation of familial bonds across geographical boundaries and maintain the dynamic network of families, communities, and religious societies, as emphasised by Simati (2009).

In summary, sovereignty, typically understood as a state or community's inherent right to self-governance and control over its territory, takes on a unique dimension when confronted by climate change challenges, particularly for low-lying island nations such as Tuvalu. In context of the historical meaning of sovereignty in the Westphalian context, many scholars critique the conventional Western perception of sovereignty. Instead, many scholars highlighted the multidimensionality of sovereignty, illustrating the diversity of statehood and the role of indigenous understandings and cultures in shaping sovereignty. Tuvalu's interpretation of sovereignty, rooted in the indigenous concept of 'Fenua', offers a unique perspective that transcends Western definitions, emphasising the interconnectedness of land, people, and the environment. This holistic view of sovereignty plays a vital role in Tuvalu's response to climate change challenges and informs strategies to safeguard their self-determination, cultural heritage, and territorial rights in the face of environmental threats.

4. Methodologies

Qualitative research methods were deliberately chosen to conduct an in-depth examination of Loss and Damage in Tuvalu, and the selection of these methods is directly tied to the unique challenges Tuvalu faces in the context of climate change. Specifically, a ‘thick description’ approach was employed to investigate the intricate meanings (Geertz, 1973) that Tuvalu’s residents attach to their language and actions within the context of climate-induced Loss and Damage. This approach comprehensive explains the subject by uncovering underlying inferences and implications in the Tuvaluan context. In the ‘thick description’ approach adopted for this research, a multifaceted methodology was employed, combining interviews with key stakeholders, including representatives from Tuvalu, Non-Governmental Organisations (NGO’s), the UN and government officials as well as a literature analysis of relevant documents, ensuring a comprehensive exploration of Loss and Damage in Tuvalu.

Given that Loss and Damage is an emerging debate, meaning that many discussions are still ongoing and happening behind the scenes, the key elements of the fund still had to be identified and came up through the research. Therefore, an exploratory approach was taken (Babbie, 2020). Hence, the time frame from the Literature Analysis and the interviews overlapped, so the findings of either one of them can benefit the other.

Further, Farbotko and Lazrus (2012) approach of employing a ‘listening disposition’ has been chosen for this thesis. Thereby, the goal is to empower the voices of leaders from Loss and Damage communities, such as Tuvalu in global climate adaptation discussions and negotiations (i.e., such as COP), rather than speaking for them (Bordner et al., 2020). This was achieved through reading interviews, speeches and texts from Tuvaluans about the issue and interviewing Tuvaluans to understand the issue from their perspective.

4.1. Thick Description

One of the defining characteristics of a ‘thick description’, as stated by Denzin (2001), is the consideration of voices, feelings, actions, and meanings of interacting individuals. This humanistic approach allows researchers to explore the rich tapestry of intentions and meanings that organise actions. By tracing the evolution and development of an act, and presenting it as a text to be interpreted, thick description delves into the multidimensional aspects of the subject (Denzin, 2001). Given the unique nature of Loss and Damage in Tuvalu, where climate change threatens the nation’s very existence, it is imperative to emphasise the importance of understanding the intentions and meanings of individuals and communities directly affected.

Moreover, thick description’s descriptive and interpretive nature is particularly relevant in the Tuvaluan context, as it adds multiple layers of understanding, vital to comprehending the intricacies of how climate change impacts are perceived and experienced in this unique island nation (Maxwell, 2010). This nuanced, multilevel, and multiperspective approach (Geertz, 1973) helps unearth underlying structures and connections specific to Tuvalu’s situation. It sheds light on the deep societal views of the challenges posed by climate change (Thompson, 2001). Rohrlich (1987), further encourages combining policy and behaviourism to present a complete picture of events and to understand the values motivating policy makers, as well as the social perceptions guiding policy-making processes (Rohrlich, 1987), which can help

capture the complexities of Loss and Damage in a nation confronting existential threats from rising sea levels.

Despite its strengths, thick description is not without critique. Thompson (2001) highlights that this method can be time-consuming. Furthermore, Maxwell (2010) argues that it may not always be considered valid, while Patton (1990) points out its potential subjectivity due to the researcher's predispositions in data collection and interpretation. To mitigate potential subjectivity, a diverse range of sources[6] and perspectives[7] were considered, contributing to a comprehensive and balanced analysis. By proactively addressing these concerns and implementing these strategies, the thesis sought to uphold the reliability and rigor of the thick description methodology throughout the research process.

In conclusion, adopting a 'thick description' approach in this research is specifically tailored to explore the profound challenges of Loss and Damage in Tuvalu. It offers a humanistic lens to understand the intricacies of this unique context, uncovering underlying structures and connections essential to address the complex and existential issues faced by Tuvalu in the era of climate change. Despite its potential limitations, thick description remains a valuable tool to gain a comprehensive and meaningful understanding of the Loss and Damage debate within Tuvalu's distinctive circumstances.

4.2. Interviews

Interviews are a widespread qualitative research technique that enables researchers to better comprehend their interviewee's experience and environment (Babbie, 2020). Thus, the interviews provided a crucial qualitative dimension to the thesis, allowing for direct engagement with individuals and communities in Tuvalu affected by climate-induced Loss and Damage. The interviews were semi-structured, meaning a list of questions was prepared before the interviews, which was utilised as a framework for the interview. The interview guide can be found in Appendix A. The actual interviews deviated from the outline since the respondents were encouraged to talk about their experiences and points of view in a conversational fashion. In total, twelve interviews were conducted.

4.2.1. Sampling

To ensure a comprehensive exploration of various perspectives and insights, a diverse array of professions and backgrounds were consulted through the selection of interviews. Concretely, workers from relevant Non-Governmental Organisations (NGOs) or civil society organisations, employees from international organisations, researchers, Tuvaluans, and policymakers were consulted[7]. While Non-Governmental Organisations (NGO)'s, the media, and decision-makers may shed more light into the opinions and expectations of the new Loss and Damage Fund, Tuvaluans' participation in interviews was crucial since they are the ones (potentially) affected by the fund and therefore provided their viewpoint on the issue. The information gathered from these interviews was crucial for understanding how Tuvaluans view the methods for adapting

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[6] The different documents used for the analysis can be found in Appendix D: List of Documents.
[7] Detailed information about the interviewees can be found in Appendix C: List of Interviewees.

to climate change and how those methods enhance their sovereignty. Criteria to be eligible for the interview were speaking English and being knowledgeable on Tuvalu and/ or the Loss and Damage Fund.

In order to schedule interviews, emails were sent to the interviewees. The actual interviews were conducted online to facilitate communication with individuals worldwide. Depending on the interviewee's preference, the online platforms Zoom or Microsoft Teams, were utilised. On average, the interviews took 30 min. All interviews were conducted in English via a video call and with the interviewee's consent[8]. 11 out of 12 interviews were audio recorded; simultaneously, notes were taken to generate follow-up questions and facilitate the interview process. Thereafter, all interviews were transcribed, coded, and analysed.

4.3. Document Analysis

Simultaneously, a thorough document analysis was conducted, examining existing scholarly work, policy documents, and relevant materials. This literature analysis complemented the interviews by providing a broader contextual framework and enabling a comparison of findings with existing knowledge on Loss and Damage and climate change impacts in Tuvalu. Concretely, twenty key documents[9] were analysed from official UNFCCC meeting notes and secretariat documents, policy documents, government publications and reports, blog posts, and journal articles.

The criteria for the documents to be used were: being openly accessible; written in English; being published within a specific time frame, namely after the COP27 in November 2022 (point in time where it has been decided to establish the Loss and Damage Fund) and before the 31st of June (end of data collection); relevant to the research topic in regards to relating to the Loss and Damage Fund and relating to either Tuvalu or AOSIS or SIDS or developing countries or inequalities and injustices or colonialism. A few exceptions have been made regarding the time frame. Concretely, some documents were sent by the interviewees and therefore also included in the analysis. Further, to have a reference point for Tuvalu's progress and state of the environment, the latest versions of the 'Updated Nationally Determined Contribution (NDC) from the Government of Tuvalu'(Government-of-Tuvalu, 2022), the 'Te Kete - National Strategy for Sustainable Development 2021-2030' (Government-of-Tuvalu, 2020) and the 'Tuvalus State of the Environment 2022' (SPREP, 2022) reports were used, even though they were not published within the mentioned time frame.

To identify the key documents for the analysis, relevant organisations in the field of Loss and Damage were consulted, propositions about relevant sources made by the interviewees, and finally, own research within databases were utilised. These documents were assessed through Search Engines, such as 'Scopus', 'WUR online library', 'Google Scholar' and 'Google'. There, specific keywords were used such as: 'Loss and Damage Fund', 'Loss and Damage', 'Tuvalu', 'Small Island Developing States', 'Pacific Island states', 'Developing countries',

[8] The consent form can be found in Appendix B: Informed Consent Form.
[9] A list of all researched documents can be found in Appendix D: List of Documents.

‘Climate Colonialism’, ‘Eco-Colonialism’, ‘Green Colonialism’, ‘Environmental Colonialism’, and ‘Sovereignty’.

4.4. Research Ethics and Data Management

The materials used for the document analysis were public and open-access documents that can be accessed through the UNFCCC archives and Search Engines. As a result, no permission was needed to use them. In the UNFCCC documents, all speakers are public figures and hence, maintaining anonymity is not necessary. Regarding the interviews, most interviewees preferred to remain anonymous, thus, their request for anonymity was fully respected and ensured. Following the ‘Netherlands Code of Conduct for Research Integrity’ (Netherlands-Code-of-Conduct-for-Research-Integrity, 2018), this thesis does not raise any major ethical issues.

The interviews were recorded on a laptop. After every interview, the audio file and the consent form were sent to Microsoft OneDrive and removed from the laptop. The recordings were transcribed into a Word document that was proofread and saved in Microsoft OneDrive. After the completion of the thesis, the interview transcripts, audio recordings and consent forms will be securely and confidentially archived in the Environmental Policy (ENP) secretariat for ten years, to which only the data manager and ENP chair have access.

4.5. Data Analysis

The data analysis process involved using MAXQDA 2022 (Software, 2021) as a tool to enhance data structuring and familiarity. For this, the thematic analysis process by Braun and Clarke (2006) and Braun and Clarke (2012) was followed (i.e., familiarisation with data, generation of codes, search for themes, review of themes, defining themes, producing the report).

Initially, multiple readings of the interviews and documents were undertaken to establish a deep familiarity with the dataset. A coding scheme[10] was meticulously developed to analyse both the interview transcripts and documents using an inductive approach that identified emerging patterns and themes (Babbie, 2020). This iterative coding process was informed by the interview guide but was adapted throughout the research process.

Then all interviews and documents were analysed using the established coding scheme. To identify and prioritise salient themes within the dataset, a frequency-based approach (Kuckartz & Kuckartz, 2002) was adopted. In Appendix F, the results from the MaxQda Analysis can be found, showing visual presentations and more insights into the frequency of each theme and code.

To ensure a comprehensive understanding of the intricate relationships between (less) frequent codes and themes, additional data consultations were carried out, uncovering the nuanced interconnections within the broader narrative. Recognising the risk of oversimplification when imposing predefined categories on all interviews and texts, the interviews were thoroughly revisited and read, highlighting the individual perspectives of each interviewee.

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[10] The coding scheme can be found in Appendix E: Coding Scheme.

Based on the frequency approach and the further consultation of the interviews, three overarching themes emerged: Loss and Damage in Tuvalu, barriers towards a Loss and Damage Fund, as well as the conditions for a Loss and Damage Fund. These overarching themes formed the basis for the next three results chapters. The presentation of the findings embraces a narrative and storytelling approach (Josselson & Lieblich, 1999), emphasising the stories and experiences shared by participants to offer a comprehensive and humanistic perspective.

As above mentioned, this thesis comprises three results chapters based on the findings from the interviews and the analysed documents. Concretely, the first results chapter 'Loss and Damage in Tuvalu: An Uncharted Voyage', discusses the consequences of climate-induced Loss and Damage in Tuvalu, Tuvaluan's worry about relocation, as well as economic and non-economic Loss and Damage. The second result chapter 'Obstacles on the Path to a Loss and Damage Fund' illustrates how the role of negotiations, the (ongoing) effects of colonialism, the experienced inequality and injustice of the developing countries, the responsibility of the developed countries, as well as the (ongoing) power dynamics can serve as a barrier towards the implementation of the Loss and Damage Fund. The third results chapter 'Safeguarding Tuvalu's Future', explains Tuvalu's understanding of sovereignty; presents the conditions, potential actors, and financing approaches for a Loss and Damage Fund; as well as illustrates Tuvalu's proactive approaches and stresses the urgency for action.

Lastly, a commitment to a decolonising approach was maintained throughout the data analysis process. This approach acknowledges historical and structural factors that have shaped Tuvalu's experiences with Loss and Damage, with an emphasis on amplifying the voices of those directly affected, addressing the implications of colonial legacies, and exploring pathways toward a more equitable future. This approach underscores a dedication to respecting the agency and knowledge of Tuvalu's inhabitants while critically examining and challenging colonial narratives, power dynamics, and injustices that continue to shape their reality.

4.6. Reflection on the Interviews

Throughout the interview process with Tuvaluans for this research, a profound sense of gratitude and mutual respect emerged. These conversations offered valuable insights into the lives and experiences of individuals directly affected by human- caused climate change and Loss and Damage.

One striking aspect was the interviewees' gratitude for the opportunity to share their stories. Despite the challenges of discussing deeply personal and often distressing experiences, they recognised the significance of their narratives in contributing to academic studies and raising awareness. As one interviewee put it, "It's my enemy to be interviewed and talk about this, but I understand the significance of being interviewed and how it can contribute as well to the studies and also capturing our stories."

Conversely, I felt a deep sense of responsibility as a researcher to ensure that these voices were not only heard but amplified. Interviewees stressed the importance of disseminating their stories and thanked me for the opportunity to talk to me and my involvement in this research. Their appreciation reinforced the notion that, still, the awareness of this topic lacks behind and that

oftentimes during past interviews, the interviewees have been interrupted and not given the opportunity to share their story.

The interviews also prompted me to reflect on the distribution of responsibility in addressing climate change and its impacts. This underscored the shared nature of the responsibility, regardless of individual roles or backgrounds. It emphasised that collective efforts are essential to tackle the complex challenges posed by climate change. Moreover, the interviews left me with a strong sense of duty as a Western, white researcher who is partially responsible for the structures contributing to the hardships faced by Tuvaluans. Interviewees' stories compelled me to consider how I could leverage my position and platform to empower Tuvaluans and advocate for their concerns.

In essence, these interviews served as a reminder of the profound human consequences of climate change and Loss and Damage. They highlighted the shared responsibility we all hold in addressing these pressing issues. As a researcher, I am committed to using this research not only to advance academic knowledge but also to amplify the voices of those affected and advocate for change in any way I can. Also, this research showed me that it is not too late, and we can still reduce the impacts of human-caused climate change if we act now. As Tuvaluans said: 'If we save Tuvalu, we can save the world'.

5. Loss and Damage in Tuvalu: An Uncharted Voyage

The following chapter delves deep into the intricacies of Loss and Damage in Tuvalu, exposing the profound consequences it exacts upon the Tuvaluan population. The battle they wage against the encroaching tides, driven by climate change, symbolises the core of their existential crisis. Tuvaluans grapple with this crisis on a daily basis, fighting to safeguard their homes, culture, and way of life against the impacts of climate change. These consequences manifest tangibly and with profound implications, from the devastation left in the wake of cyclones like Pam in 2015 to the surging waters that jeopardise their drinking water, food security, and energy supply. With the looming spectre of existential questions—relocation or extreme adaptation—uncertainty permeates every aspect of life. In unison with many other vulnerable island nations, Tuvalu confronts the urgent imperative of addressing Loss and Damage from climate change. Within this complex realm, the demarcation between economic and non-economic costs blurs, amplifying the vulnerability of cultural heritage to an uncertain future. The looming fear of forced relocation amplifies the gravity of these concerns, invoking profound questions about identity and heritage preservation. Subsequently, this chapter navigates through the intricate dimensions of Loss and Damage in Tuvalu, comprehending its far-reaching consequences as Tuvaluans stand resolute against the rising tide of change.

5.1. Loss and Damage and the Consequences of Climate Change

The concept of Loss and Damage in Tuvalu is fraught with ambiguity and complexity. All interviewees expressed the absence of a universally accepted framework. While reflecting the prevailing international understanding, which characterises it as "impacts of climate change that are not or cannot be avoided by adaptation and mitigation efforts", this definition not only leaves room for interpretation but also blurs boundaries and introduces formidable challenges (Mustapha & Williams, 2023).

As stated by AOSIS (2023) "climate change has already caused and will increasingly cause Loss and Damage and that, as temperatures rise, impacts from extreme weather events as well as slow onset events, will pose an ever-greater social, economic and environmental threat". In Tuvalu, these changes are already happening. This reality is vivid in Tuvalu, where the restless battle against encroaching tides, likened by some as "rolling the rock up the hill every day" (Interview Pacific Island Researcher), symbolises Tuvaluans' daily struggle to protect their homes, culture, and way of life. A struggle highlighted by a Tuvaluan Government Official, interviewed for this thesis: "We live it [climate change] every day. This is man-made, man created". Consequently, Tuvaluans face a crisis tangled in the complexity of a "plate of spaghetti" (Pacific Island Researcher). As the impacts of climate change intensify, they are experiencing tangible and profound changes in their environment, as highlighted in the following quote:

> *"The surging waters, fuelled by the climate crisis, also pose extreme risk to drinking water, food security and energy supply. Critical subsistence food crops such as coconuts and pulaka (taro) are failing in the high-salinity soil and weather and temperature changes bring devastating cyclones, record temperatures and more frequent periods of drought. Fresh food is almost non-existent, making the population more reliant on imported products, which are expensive and lack nutritional value."- Fainu (2023)*

These tangible and profound consequences of climate change are illustrated by events like Cyclone Pam in 2015, which had devastating impacts on the infrastructure crops and fresh water supplies across three Tuvaluan islands, explained a UN Representative for Pacific Island states, who has been interviewed for this thesis. Further explaining that: "the government had to provide relief to those countries, that's the sort of thing, Loss and Damage should be dealing with in helping countries rebuild from the impacts of climate change" (UN Representative for Pacific Island states).

Tuvalu confronts a stark and imminent threat. At current rates of sea level rise, estimates suggest that within just three decades, nearly half of Funafuti, Tuvalu's capital, could be submerged by tidal waters. By the year 2100, this figure could increase to a staggering 95%, rendering the land essentially uninhabitable (Fainu, 2023). A Tuvaluan Negotiator further emphasised during the interview: "Tuvalu is known to be the first country to be submerged in the water due to sea level rise. And it's happening in just 30 to 50 years".

This situation forces Tuvaluans to grapple with an essential question, as posed by a UN Representative for Loss and Damage interviewed for this thesis: "What does this mean for Tuvalu and the Pacific atolls for whom climate change is an existential threat? Are we really going to wait until after their entire islands are uninhabitable? Then we try and find the loss? […] The longer-term question [looms] relocation or extreme adaptation?".

The urgency of survival weighs heavily, especially on the youth. As described in Fainu (2023), a Tuvaluan interviewee explains: "It's the worst feeling ever; worse than being afraid of heights, afraid of the dark. Now we're afraid of the future." As the waters rise at an alarming pace, Tuvaluans share stories of standing knee-deep in seawater that emerges through the porous ground, underscoring the gravity of their climate change situation (Fainu, 2023).

5.2. The Worry of Relocation

> *"As we know that sea level rise is coming up. People are being forced to migrate because of the uncertainty of the future of our nation for each of our next generation and we've experienced that when people are - our people- are being migrated. They lose their culture. They lose their language, native language. And that is something that's already happening. And that is what is Loss and Damage." - Tuvaluan Negotiator*

As the Tuvaluan Negotiator explained, the rising sea levels are compelling Tuvaluans to migrate due to the uncertain future of their nation and its impact on their culture and native language. Some Tuvaluans have already relocated to places like New Zealand, a painful decision that feels like a betrayal of their people. As cited in Fainu (2023), a Tuvaluan explains:

> *"My third child was born in New Zealand, so she doesn't know anything about Tuvalu; she's lost something that's so important. It makes me sad; she has lost those beautiful Tuvalu values she should have grown up with: respect, helping each other, working together – we don't have it over here; they teach it in school but it's totally different." - Fainu (2023)*

Australia[11] has also proposed providing land for relocation but conditioned it on acquiring maritime and fisheries rights, a proposition that was turned down by the Tuvaluan government (Fainu, 2023). Also, Climate refugees do not fall within the categories defined by the 1951 UN Refugee Convention, further adding complexity to the situation (Natano, 2022).

The debate over relocation within Tuvalu's communities is marked by complex emotions. While some view it as a pragmatic response to the existential threat, others vehemently oppose leaving their homeland. A Tuvaluan Researcher further explains this:

> *"Some of these people come to Tuvalu to do research and say: Tuvalu is sinking. Are you moving? When are you gonna go? What do you really like? Do you wanna go? It's more like imposing the idea that people have to move. That is not what we want. The narrative, they are like a lot of people that come to Tuvalu to talk about climate change. A lot of them. They bring a narrative that not really suits our culture. We don't want to go. We don't want to go until the very end. We would do anything to stay in Tuvalu. But there's a lot of media and researcher that come to Tuvalu with the idea that migration is the option; that we have to leave Tuvalu." - Tuvaluan Researcher.*

"As Tuvaluans, we have to stay here and protect our country, because if we save Tuvalu, we also save the world", declares another Tuvaluan as cited in Fainu (2023). According to Fainu (2023), the international community must grasp the individual crisis Tuvalu faces and prioritise it urgently. Hence, this debate over relocation within Tuvalu's communities is marked by complex emotions. The clash between these perspectives underscores the profound connection between Tuvaluans and their islands, where culture, tradition, and identity are intrinsically linked.

5.3. Economic and Non-Economic Loss and Damage - The Price Tag of Nature's Wrath

While most interviewees immediately point to the monetary aspects of Loss and Damage, such as damage to infrastructure and livelihoods, in Tuvaluan the consequences extend beyond the purely economic realm. Indigenous knowledge, passed down through generations, is eroding in the face of unpredictable weather patterns and shifting ecosystems. Indigenous practices tied to the land and sea are under threat, endangering the very core of Tuvalu's cultural identity (Tuvaluan Government Official, Tuvaluan Researcher, Tuvaluan Negotiator).

While a UN economist, interviewed for this thesis, contended that nearly all things can be assigned a monetary value, emphasising the deep interrelation between culture and economics, others argued that there is a distinction between economic and non-economic losses (Environmental Lawyer, UN Representative for Loss and Damage). But the line between

[11] This was a proposition by the former Australian prime minister Kevin Rudd. He published an essay in which he suggested that Tuvalu, Kiribati, and Nauru would receive the Australian citizenship for trading in their Exclusive Economic Zone (EEZ) resources, thereby also losing their sovereignty. Among the other two islands, Tuvalu did not accept this exchange. Also, Tuvalu's former Prime Minister, Enele Sopoaga classified this act as 'neo-colonialism', explaining how Tuvalu has no intention of being subjected to colonial oversight or guidance again. Further, he emphasised that Tuvalu is a fully independent nation, and will not jeopardise their fishery rights and local assets (Dobell, 2019).

economic and non-economic costs blurs, questioning how to put a price on heritage damaged by climate change. A UN Representative for Pacific Island states argued:

> *"I mean, that's the real challenge. It's very hard to replace heritage [which has] been damaged by cyclones or severe weather events. That's a real challenge of how you deal with that. How do you compensate communities for the loss of gravesites or other cultural sites? I honestly don't know how that can be done". - UN Representative for Pacific Island states*

Food is a very important part in the Tuvaluan culture. For instance, "Tonai" signifies the practice of sharing food with pastors, families, and "fakaalofa" (=translates to welcoming visitors) (Government-of-Tuvalu, 2020). A Tuvaluan Government Official gives an example:

> *"There's traditional knowledge on when crops certain crops will grow or should be harvested like bread, fruits. The root crops we call 'pulaka'- it's like taro or tapioca. And there's traditional knowledge on when these crops should be planted and when they should be harvested. - Tuvaluan Government Official*

However, this cultural richness is under threat, traditional knowledge regarding crop cultivation and harvesting has been disrupted by unpredictable climate patterns. The once-reliable practices that have sustained their way of life are unravelling, posing a profound challenge to the preservation of their unique culture. The Tuvaluan Government Official elaborates:

> *"That traditional knowledge is all down the drain because of climate change. Like, all of a sudden, it'll take maybe six months to grow something [...] Like nothing's predictable anymore [...] And so being unable to provide these root crops that are so important to our culture and our customs takes away a lot of the learning processes of being a Tuvaluan. I mean, we won't be able to teach our children traditional knowledge of how you plant these crops, why they're so important to us, their value in in our culture, if we can't even plant them, there's no point because then we're just going to - our children are basically going to survive off food from the store, from imported products and losing that slowly. I mean, in my generation, I know that obviously our grandparents, their knowledge of how to plant things won't be applied in this generation for the next 20 years." - Tuvaluan Government Official*

Building upon the significance of food in Tuvalu, it's crucial to recognise the intricate relationship between traditional knowledge, heritage, and their ability to adapt to environmental challenges. As a Tuvaluan Negotiator highlighted:

> *"All people could read the sky. They could read the sky and could tell you that the fish stock is around that side. It's southwest and you could catch it in in just a few minutes and then you can come back and then they can even read the sky and say that bad weather is coming. We have to prepare. So, they get the food. They have their own preservation of food that could allow them to preserve the quality of the food for three days maybe. And all those kinds of indigenous knowledge make us adapt to the crisis and [make us] even unique. But with as of now, this knowledge has been, slowly diminished, and we are trying to retrieve this knowledge, with the integration of technology and how we can match this together, so that we can, have profound or more, adaptive solutions to the crisis that we are facing". – Tuvaluan Negotiator*

Consequently, in the face of impending submergence and cultural erosion, Tuvalu confronts a dual crisis—physical displacement and the loss of cultural heritage. The intricate interplay of

economic and non-economic Loss and Damage complicates the assessment of nature's true cost. Indigenous knowledge and practices intricately tied to the land and sea are under siege due to climate-related uncertainties. The relocation dilemma, whether viewed as a pragmatic response or an unwavering attachment to the homeland, underscores the profound bond between Tuvaluans and their islands. This narrative exemplifies the urgency of Tuvalu's plight and emphasises the need to protect not only the land but also the culture, traditions, and identity that define this resilient nation. In the next chapter, the barriers towards implementing the Loss and Damage Fund will be examined.

6. Obstacles on the Path to a Loss and Damage Fund

This chapter delves into the intricate challenges that impede the establishment and implementation of the Loss and Damage Fund. Bureaucracy looms large, complicating UN processes and fostering disagreements between developed and developing countries about the fund's format and functionality. The urgency of these discussions clashes with the cumbersome nature of international bureaucracy, further burdening Pacific Island nations. The absence of adequate financial contributions and complex financial access mechanisms adds to the complexity. Therefore, the intricacies of negotiation, along with the moral dilemmas inherent to the process, come into focus, underscoring the ability of making significant progress. The lingering shadow of colonialism continues to shape the trajectory of climate negotiations, while inequalities and injustices rooted in history underscore the need for climate justice. The responsibility of the developed world, power dynamics in climate negotiations, and their impact on climate action take a central role. Subsequently, the chapter sheds lights on these challenges, underscoring the necessity for change to foster a more equitable and resilient world.

6.1. The Negotiation Tightrope

Bureaucracy has emerged as a major roadblock, as underscored by all interviewees. This bureaucratic quagmire extends to the complexities within UN processes and the persistent disagreements between developed and developing countries regarding the fund's format and functionality. A UN Economist emphasised the time-consuming nature of these debates, predicting that "agreeing on the format and functionality of the fund will take years because there'll be this big debate between advanced and developing countries". Such delays fostered pessimism about the fund's timeline, as expressed by a Pacific Island Researcher: "But the time between making a decision like that and having an impact on the ground is 5 or 10 years. Hopefully I'm wrong, but I mean, it's a UN process". They added that these bureaucratic hurdles further burdened small countries, due to a lack of resources and capacity to go through the resulting complicated portfolios of funding and reporting. Additionally, the pace of UN processes clashed with the urgent needs of vulnerable nations, leaving them grappling with extensive bureaucratic procedures ill-suited for addressing the rapid onset of climate change (UN Representative for Loss and Damage). The Pacific Island Researcher stresses: "I think we'll cross 1.5 [degrees] before we get a Loss and Damage Fund".

The significance of funding sources, the lack of financial contributions, and the complexities of financial access mechanisms further complicate the matter, with developed countries leveraging their financial control to dictate terms and discussions. As a PhD Researcher from Wageningen University posed in the interview: "You can establish a fund, but if the fund has no money, then what good is the fund?"

Structural and institutional barriers add layers of complexity to an already intricate process. For example, concerns were raised about external consultants leading projects, perpetuating dependency on foreign expertise instead of nurturing local capacity (Tuvaluan Government Official). Moreover, geographical/physical isolation add another barrier for Tuvaluans to advocate for a Loss and Damage Fund. For example, being grouped together with other countries, takes away the possibility for Tuvaluans to share their story and international

meetings often follow international timelines (Interview Tuvaluan Government Official). These multifaceted obstacles illuminate the formidable path toward establishing an effective Loss and Damage Fund.

Even though, these negotiations play an essential role in establishing the Loss and Damage Fund, this path is laden with multifaceted challenges and moral dilemmas that tested the resolve of nations and the international community. As the Pacific Island Researcher remarked, these negotiations, though intriguing, often struggled to "move the needle very far" exposing the inherent hypocrisies within climate conferences held in various locations, some notably contributing to environmental issues themselves. Further arguing that: "those hypocrisies are exactly the same hypocrisies that keep us from making progress" (Pacific Island Researcher). The complexity of the task at hand became evident when discussing the scale of financial resources needed to address Loss and Damage. As articulated by a UN Representative for Pacific Island states:

> *"I don't think, you know, having discussions on climate change under this forum here [Bonn climate change conference in June 2023] will think, outside the box enough to bring the order of magnitude of the money that's required to deal with Loss and Damage. And I'm suggesting we're talking about billions of dollars, if not trillions of dollars of damage incurred by countries already as a consequence of climate change. So, we've got to really think of innovative sources of funding for the Loss and Damage Fund". - UN Representative for Pacific Island states*

According to the PhD Researcher from Wageningen University, civil society organisations played a major role in amplifying the urgency of the Loss and Damage issue during COP27. They ensured that the pressing matter remained in the global spotlight, even when the negotiation process seemed to diminish. A Representative from Civil Society Organisation said that the hopes are high that civil society organisations will also support the establishment of a fund at COP28. While the UN climate conferences, such as COP, were significant global events, they often became arenas for political posturing and extensive side meetings, as noted by the UN Economist, asking for "a more focused, technical, and less political approach" to accelerate the progress. Despite the criticisms and scepticism surrounding the UN process, many individuals and groups held out hope for its potential to drive meaningful change. A Representative from a Global South-driven Grassroot Movement emphasised: "As corrupt as we know that COP is, we must not deny it, but we must take it back. We must fight to take it back, to represent the people and not the company". Similarly, the PhD Researcher from Wageningen University said:

> *"As much as I criticise the UN and the UN process, I will always advocate for the establishment of financial mechanisms under the UN, because that's the only place where climate justice issues can be discussed and potentially adhered to" - PhD Researcher from Wageningen University*

The UN Bonn climate change conference in June 2023 was not viewed very positively by the interviewees. As whilst the Representative from Civil Society Organisation mentioned some progress about Loss and Damage at the conference, other interviewees (UN Representative for Pacific Island states; PhD Researcher from Wageningen University; Tuvaluan Negotiator) said that there was little or no progress and emphasised the significant disagreements between

developed and developing nations, a claim which was also supported by the analysed documents (Bulletin, 2023; Richards et al., 2023). Moreover, the UN Representative for Pacific Island states pointed out parallels with the deliberations concerning the Green Climate Fund, thereby underscoring a concerning lack of progress in assimilating lessons from prior experiences and past mistakes, a point echoed by Bakhtaoui et al. (2023). Similarly, the progress by the Transitional Committee (UNFCCC, 2023a, 2023b) has been referred to as very minimal and slow (PhD Researcher from Wageningen University, UN Representative for Pacific Island states).

In parallel to the COP negotiations, the Summit on a New Global Financing Pact, in Paris, in June 2023 aimed at reshaping the international financial system to address inequalities, finance climate transitions, and achieve the Sustainable Development Goals (Bulletin, 2023). However, scepticism surrounded this event, with concerns that they did not yield substantial outcomes, particularly in addressing the pressing issue of Loss and Damage (Representative from Civil Society Organisation) and could be viewed instead as "a complete distraction" by developed countries (PhD Researcher from Wageningen University).

Despite the frustrations and the intricacies of the negotiation process, these forums remained vital for discussing climate justice and historical responsibilities, bringing countries and non-country stakeholders together and drawing media attention to the global climate crisis. Concretely, the PhD Researcher from Wageningen University underscored the importance of these platforms for highlighting climate justice issues, allowing for critical dialogues and increasing global awareness.

6.2. The Lingering Shadow of Colonialism

Colonialism, an epoch of history imbued with imperialistic aspirations and the subjugation of nations, has indelibly marked Tuvalu's contemporary climate adaptation. It remains more than an epoch of the past; it is a resounding echo that continues to exist throughout the islands. As articulated by a Tuvaluan Negotiator: "It's more like history repeating itself. It's about colonialism. Those kinds of practices in those colonial eras are still practiced now". Similarly, a Tuvaluan Government Official said: "I feel like it's like colonialism all over again. Which is very sad". These quotes underscore the persistent influence of colonialism, illustrating that historical injustices continue to shape the present.

Past colonial influence extends beyond the realm of labour and seeps into the very fabric of Tuvaluan culture and governance. As elucidated by a Tuvaluan Researcher, the imprint of past colonial eras substantially affects Tuvalu's cultural practices and governance structures. The echoes of colonialism linger, shaping the identity of the Tuvaluan people and their interactions with the broader international community. The enduring legacy of colonialism can be discerned in the global power dynamics that often leave Tuvalu and other island states marginalised within international forums (Tuvaluan Researcher).

These past colonial practices also infiltrate the current education system, marginalising indigenous knowledge essential for survival on the islands. Indigenous practices, such as fishing and handicrafts, have been excluded from curricula, undermining the transmission of valuable

traditions. The Tuvaluan Researcher decries this loss of culture due to colonial legacies, illustrating how colonialism continues to shape educational practices today:

> *"When I was in high school, back in Tuvalu; there was this subject called 'vernacular' which is actually probably Tuvaluan language. We already learned a little bit of that back in my days, but then they degreased that. They put it in the bin. They said nah it's not useful. Don't do it anymore. Again, there are specific ways of counting into Tuvalu which is very unique to Tuvalu. We don't count fish like 1-2. It's totally different from saying 1234. It's a very different way of counting. But that's not done anymore. They're not doing that anymore in schools at the moment. Those are the sort of so like colonial influence back in the days where we're talking about culture probably. It's not good enough. When you go to the outside world. That's the thing. Not everyone goes to the outside world lot. A lot-maybe 90% of the students return to their island. And they learn that indigenous or cultural knowledge when they go back home. To their parents, to their families, to their communities – that's when they - that's where they learn cultural practices. At that community level. But I really think that it should also be part of the education" - Tuvaluan Researcher*

Furthermore, the spectre of colonialism significantly influences the landscape of climate negotiations. As keenly observed by the Environmental Lawyer, the UN although indispensable in addressing global challenges, is inherently flawed due to its historical origins and prevailing power structures. Notably, the UN's formation during a bygone era has given rise to lasting structural imperfections that continue to shape modern climate negotiations (Environmental Lawyer). These imperfections serve as a stark reminder of colonialism's enduring legacy within global institutions.

In the context of climate finance and Loss and Damage, a PhD Researcher from Wageningen University contends that issues like Loss and Damage are deeply rooted in colonialism. Developed countries' piecemeal solutions, such as utilising existing financing structures like the World Bank, perpetuate a system where developing countries have minimal influence over resource allocation, reminiscent of colonial resource exploitation. The researcher further highlighted that "Loss and Damage is a problem of colonialism that is, in my view, just completely impossible to ignore" (PhD Researcher from Wageningen University).

Debt, often regarded as a remnant of colonialism, takes centre stage in discussions surrounding the climate crisis. Debt relief and structural adjustment programs are seen as a new form of colonialism, forcing resource extraction to repay debts, thus exacerbating environmental degradation. A Representative from a Global South-driven Grassroot Movement underscores this connection between debt and environmental destruction, emphasising that it is a contemporary form of colonialism, reflecting the historical exploitation of the global South. The Representative further explains that:

> *"From the financial side, debt cancellation is like lifting the knee off the neck of the global South so we can breathe again, and we can afford to have a transition that doesn't leave out the workers and includes everyone rather than giving all this money to the global North multilateral credit institutions" - Representative from a Global South-driven Grassroot Movement*

The legacies of colonialism are complex and multifaceted, with varying degrees of acknowledgment and understanding among stakeholders. While some attribute the climate

crisis and its implications primarily to colonialism, the UN Representative for Loss and Damage cautions that the issue is multifaceted, involving factors such as economic wealth, development assistance, and international power dynamics. The mention of 'colonialism' in the IPCC's Working Group II report, titled "Climate Change 2022: Impacts, Adaptation and Vulnerability," marks the first time in 30 years, since the release of the IPCC report, that 'colonialism' has been explicitly recognised as both a historical and ongoing driver of the climate crisis (Ruwayda, 2023). Hence, the influence of colonialism remains an inescapable undercurrent in the discourse surrounding climate change in Tuvalu and beyond. It is a historical force that continues to shape the trajectory of climate negotiations and the global response to the existential threats faced by vulnerable nations like Tuvalu.

6.3. Inequality, Injustice, and the Responsibility of the Developed World

The discourse surrounding the climate crisis and its intersection with inequality and injustice is rife with narratives that expose deeply rooted disparities. Delving into the insights gleaned from interviews and documents, a compelling narrative emerges—one that emphasises the urgent need for rectifying historical injustices and addressing present-day inequalities.

Throughout the interviews, a recurring sentiment echoes the perception that smaller, economically disadvantaged nations like Tuvalu face an unfair share of exploitation in international climate negotiations. In the words of the Tuvaluan Negotiator: "The smaller we are, the poorer we are, the more we'll be bullied". This observation encapsulates the prevailing sense of vulnerability experienced by such nations. While the climate discourse frequently revolves around poverty reduction, it tends to overlook the unique cultural losses that these nations endure (Tuvaluan Negotiator).

Furthermore, the practice of grouping Pacific Island states together with other nations such as e.g., China or Pakistan under the banner of "Asia Pacific" creates a skewed power dynamic. This grouping often results in the domination of discussions by the larger nations, effectively marginalising the voices of vulnerable states. A Tuvaluan Government Official emphasises: "We are always grouped with Asia...and they are dominating these discussions". These power imbalances undermine the ability of Pacific Island nations to advocate effectively for their unique needs.

An understanding underscored throughout interviews (e.g., Representative from a Global South-driven Grassroot Movement, Representative from Civil Society Organisation, PhD Researcher from Wageningen University) is that historical power imbalances rooted in colonialism and racism continue to reverberate in the contemporary climate and inequality crisis. Recognising these historical injustices is imperative for addressing present-day disparities. As stated by Ruwayda (2023): "Inequalities produced and aggravated by the climate crisis today have 'longer and connected histories once colonialism is properly acknowledged as a continuous factor".

The economic legacies of colonialism have profoundly shaped the economies of formerly colonised nations, trapping them in an exploitative global economic system. The imposed reliance on export commodities for industrialised nations' benefit perpetuates economic disparities, as countries of the Global South remain ensnared in this cycle. It is a continuation

of the historical exploitation of these nations, dating back to colonial times (ActionAid, 2023; Fanning & Hickel, 2023).

The paradox of climate change becomes glaringly evident in interviews and literature. Despite contributing minimally to climate change, vulnerable communities bear a disproportionate burden of its impacts. This inequity underscores the urgent need for climate justice. As stated by Richards et al. (2023): "The world is now in a permanent state of polycrisis, with overlapping crises amplifying unequal and unjust impacts across the world".

Furthermore, the contribution to climate change varies dramatically between nations. Developed nations, particularly the Global North, have historically emitted the largest share of GHGs). In contrast, the GHG emissions in Tuvalu remain minimal (SPREP, 2022). However, the nation's least responsible for climate change, such as Tuvalu bear the heaviest burdens. As the Tuvaluan Negotiator put it: "So it sad that we are not responsible for the crisis, the global crisis that we are facing now". Another Tuvaluan as cited in Fainu (2023) said: "We are at the forefront of climate change, yet we contribute negligibly to climate change through emissions".

Therefore, interviewees argue that the responsibility in addressing the climate crisis lays within the developed world. Colonialism's profound impact on the economic development of some nations at the expense of others remains a defining factor in climate responsibility discussions. As stated by Ruwayda (2023): "Countries that have grown rich because of colonialism have a responsibility now, because they made their fortune by making other countries poor". Similarly, Fanning and Hickel (2023) stress that high-emission countries should make faster emissions reductions to stay on the path to 1.5°C. This historical legacy also underpins the obligation of developed countries to support vulnerable nations facing climate crises, aligning with the view that developed nations bear a historical responsibility for economic disparities that persist today (Fanning & Hickel, 2023; Savarala, 2023). The Representative from the Civil Society Organisation explains that: "those countries need to be held accountable on the emissions they made. Historical emissions".

A recurring theme in the interviews is the slow progress in recognising and acting upon historical responsibilities. The urgency for climate finance and adaptation support is highlighted, with the Tuvaluan Negotiator emphasising that this need should not be up for debate but rather a moral and ethical imperative. The polluter pays principle is mentioned frequently, particularly concerning Loss and Damage associated with climate change, but it is also noted that it is not stated in any of the Treaties under the UN (Environmental Lawyer, PhD Researcher from Wageningen University, Representative from Civil Society Organisation). In the discourse around responsibility, the UN Economist warns not to turn to a 'blame gaming discussion', indicating to stop looking for blame but move forward regarding providing solutions.

Hence, addressing the climate crisis requires a meaningful transition from acknowledgment to tangible actions and projects that actively combat climate change. It is imperative for developed countries to showcase their commitment by initiating practical endeavours aimed at supporting vulnerable nations. Moreover, the climate crisis is intrinsically intertwined with issues of inequality and injustice, deeply rooted in historical injustices that persistently influence the global landscape, disproportionately affecting the most vulnerable communities. Resolving

these disparities transcends mere matters of equity; it is a prerequisite for effective climate action. Many interviewees emphasised the moral, ethical, and historical obligations of developed nations to take decisive actions, provide substantial financial support, and be held accountable for their role in the climate crisis. The proposed compensation framework serves as a means to rectify historical imbalances and promote a more equitable and sustainable global response to climate change. Comprehensive attention to the responsibility of the developed world is pivotal in achieving climate equity and building a sustainable future.

6.4. Unveiling Power Dynamics in the Climate Crisis

The climate crisis is not solely a scientific or technical challenge— "it is a matter of power" (Representative from Global South driven Grassroot Movement). Power dynamics play a central role in global climate negotiations and initiatives, shaping the outcomes, priorities, and the ability to confront the crisis effectively. As highlighted by Ruwayda (2023): "The links between the climate emergency and historical power imbalances rooted in colonialism and racism have very real consequences".

Interviews and articles reveal a strong reality: power dynamics in global climate negotiations overwhelmingly favour developed nations. Developed countries wield significant control over funding allocation and decision-making, perpetuating inadequate mitigation efforts and responses (Richards et al., 2023). A PhD Researcher from Wageningen University underscores this disparity, stating: "The power dynamics are incredibly skewed in developed countries' favour".

Developed nations often emphasise urgency but offer superficial solutions that inadequately address the gravity of the climate crisis. As a UN Representative for Loss and Damage explained: "People from various UN agencies say, yes, it's a terrible thing, we should help, but I want to see the projects that they're prepared to offer now to support this, right?". The PhD Researcher from Wageningen University succinctly puts it: "Developed countries are talking about the urgency for action but what they are offering is just like a Band-Aid on a gunshot wound".

To address the climate emergency effectively, it is crucial to recognise that the crisis is not merely technical; it is deeply rooted in histories of skewed power relations. As stated by Ruwayda (2023): "To truly understand and tackle the climate emergency, governments, advocates, academics, and the private sector need to understand the climate and inequality crisis not simply as a technical issue, but one rooted in histories of skewed power relations". Moreover, recognising power imbalances extends to understanding how marginalised voices, particularly those from indigenous communities, are often excluded from academic, scientific, and climate negotiation spaces—a symptom of global power imbalances (Ruwayda, 2023).

A significant aspect of power dynamics is the influence of prevailing narratives. The narrative of inevitable uninhabitability perpetuates political agendas and silences alternative adaptation futures and indigenous knowledge. As stated by Farbotko et al. (2023): "Assumptions about inevitable uninhabitability are probably linked to long-embedded but problematic ideas about the superiority of the Global North". Also, this imposition of migration as the primary solution to climate-induced displacement echoes the paternalistic attitudes of colonial times (Farbotko

et al., 2023). As mentioned earlier, Tuvaluans reject this narrative, emphasising their desire to remain in their homeland and confront the challenges of climate change in line with their cultural values (Tuvaluan Researcher, Tuvaluan Government Official, Tuvaluan Negotiator). This new form of imposition contradicts their inherent resilience and further underscores the enduring colonial power dynamics at play (UN Representative for Loss and Damage). While Tuvalu has embraced innovative strategies challenging the sinking narrative, such as land reclamation and a virtual Tuvalu, these initiatives often go unnoticed on the international stage (Farbotko et al., 2023). This highlights the need for a broader recognition of diverse adaptation pathways beyond the sinking narrative.

Consequently, having explored the intricate obstacles to establishing a Loss and Damage Fund, bureaucracy has emerged as a formidable roadblock, permeating UN processes, and fuelling disagreements between developed and developing nations about the fund's structure and function. While negotiations play a vital role in establishing the Loss and Damage Fund, they are fraught with multifaceted challenges and moral dilemmas that have thus far limited significant progress. The lingering shadow of colonialism has continued to influence these climate negotiations, underscoring the necessity of addressing historical injustices and inequalities for true climate justice. Further, the intricate power dynamics at play within the climate crisis, highlight their profound impact on global climate initiatives and equity. Therefore, it becomes evident that confronting these power imbalances, recognising historical injustices, and rectifying global disparities are essential steps in securing climate justice and a sustainable future. The next chapter will explore the critical issue of safeguarding Tuvalu's sovereignty in the face of the existential threat posed by climate change.

7. Safeguarding Tuvalu's Future

This chapter delves into the essential conditions for a just transition in Tuvalu, focusing on supporting sovereignty processes amidst climate change. Sovereignty in Tuvalu goes beyond political independence, encompassing human rights, culture, indigenous knowledge and practices, and international law. The chapter dives into the Loss and Damage Fund conditions in supporting Tuvalu's sovereignty. Further, Tuvalu's proactive spirit is showcased, showing their initiatives to address climate challenges. Lastly, the chapter emphasises the urgent need for immediate action to save Tuvalu, driven by the harsh realities of climate change.

7.1. Tuvalu's Understanding of Sovereignty

In Tuvalu, the understanding of sovereignty is deeply rooted in their land and waters, culture, indigenous practices, and traditional way of living.[12] The Tuvaluan people view sovereignty as essential not only in the political sense but also as a reflection of their human rights and cultural identity (Tuvaluan Researcher, Tuvaluan Negotiator, Tuvaluan Government Official). A critical concern in Tuvalu's understanding of sovereignty is the idea that without land, they cease to exist as a nation. This perspective is encapsulated by a Tuvaluan Researcher: "All these impacts from international law that [if] you don't have land, you don't have sovereignty. You no longer are called Tuvalu. You are no longer existing".

Historically, Tuvalu has faced the challenge of retaining its sovereignty while navigating colonial times and political pressures. The decision to break away from the United Kingdom and Kiribati during colonial rule exemplified the Tuvaluan people's determination to maintain their cultural identity and self-determination[13]. The emphasis was on reclaiming their Tuvaluan sovereignty, even if it meant giving up certain privileges associated with colonial powers (Tuvaluan Researcher). The Tuvaluan Researcher further emphasises: "We want to make sure that we maintain our sovereignty as Tuvaluans, and it's not colonial sovereignty but Tuvaluan sovereignty."

The question of sovereignty also looms large in Tuvalu's climate discourse. Several interviewees (i.e., Tuvaluan Negotiator, Tuvaluan Researcher, Tuvaluan Government Official) explicitly emphasised the importance of "the preservation of our [Tuvalu's] sovereignty" (Tuvaluan Negotiator), which extends beyond political independence to encompass human rights, cultural preservation, and maritime boundaries under international law. This reflects a fundamental concern deeply ingrained in Tuvalu's perspective. It underscores the multifaceted nature of sovereignty as a key condition for addressing Loss and Damage and necessitates early conversations about safeguarding Tuvalu's sovereignty, both in terms of staying in the homeland and considering potential relocation.

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[12] In an article by the Friend of Earth Australia in 2019, a Tuvaluan also explains how the Tuvaluan concept of 'Fenua' embodies the belief that the land and sea represent identity, belonging, and sovereignty, and Pacific islanders historically viewed the ocean as a vital pathway, with their ancestors embarking on extensive sea voyages in search of new lands. Rather than an empty expanse, the ocean is revered by Tuvaluans as teeming with life, much like life on land (Kitara, 2019).

[13] In 1975, Tuvalu separated from Kiribati, and in 1978, it gained independence from the United Kingdom. This historic process solidified Tuvalu's national identity, both internally and on the world stage, preserving their cultural heritage and self-determination (Finin, 2002; Stratford et al. 2013).

Additionally, a UN Representative on Pacific Island states has expounded on various dimensions of Tuvalu's sovereignty concerns:

> *"There's the sort of physical aspects of Tuvalu remaining as a nation and staying as a nation. And you know that we have the physical capabilities of doing that. There's a technical aspect to it. There's a legal aspect to this. And Tuvalu has been running a campaign in the Pacific about enshrining the concept of once a territorial boundary is created under the law of the sea, the base baselines under the law of the sea, that those baselines will remain constant irrespective of sea level rise. And Tuvalu has been mounting a campaign for a number of years on that. And they've got support from the Pacific, all the Pacific leaders to support that notion. And so they're making an outreach to all countries that they have diplomatic relations with to sign - to support, to the notion that once a territorial boundary is established, that will remain in perpetuity. And so that's the sort of the legal aspect of enshrining sort of survival of the nation" - UN Representative on Pacific Island states*

In the context of Tuvalu, the significance of indigenous knowledge, heritage, and culture in regard to Tuvalu's sovereignty cannot be overstated. Tuvaluan society is deeply rooted in traditions that emphasise values like "fakalogo (obedience), ava (respect), fakamaoni (integrity), and alofa (love, caring and the sharing of resources)" among "the family, island community, and church" (Government-of-Tuvalu, 2022). These values are embodied in the rituals and practices that take place in the traditional meeting hall, known as the "fale kaupule" where, they are performing dances and singing hymns among others (Fainu, 2023). The Tuvaluan Negotiator also emphasises: "It's our culture that unites us. It's our culture that makes us embrace everything that we have".

Similarly, and as explained in detail in chapter 5, indigenous knowledge and practices related to food, play an important role in Tuvalu and are now being threatened by climate change (Tuvaluan Government Official). Similarly, a Tuvaluan Representative from an NGO shares the interconnection between Tuvaluans and their land and water, which is also threatened by climate change. Therefore, integrating indigenous knowledge and practices into adaptation measures is emphasised. Education that promotes traditional skills, such as fishing and handicrafts, is seen as a way to maintain cultural resilience (Tuvaluan Researcher, Tuvaluan Negotiator). Furthermore, a Tuvaluan perspective on climate change is highlighted, where the people's close connection to their environment makes them the best experts on the challenges they face (Tuvaluan Researcher), potentially supporting processes of sovereignty.

One initiative taken by Tuvalu is the 'Rising Nation Initiative', which aims to preserve sovereignty and human rights. The Prime Minister of Tuvalu Kausea Natano (2022) elaborates on this in his National Statement at Cop27:

> *"Tuvalu and the Marshall Islands have established a 'Rising Nation Initiative', to commit the international community to preserving our sovereignty and basic human rights. These include inter alia the rights to life, health, food and water, livelihood, culture, privacy and home, life and property". - Natano (2022)*

Tuvalu has acceded to the UNESCO World Heritage Convention, signalling its commitment to protecting its cultural heritage amid climate change. This represents a shift towards recognising

the incalculable Loss and Damage to culture and heritage as a part of the broader conversation about sovereignty (UN Representative for Loss and Damage, Tuvaluan Negotiator).

Hence, Tuvalu's understanding of sovereignty is deeply linked to its land and waters, culture, indigenous practices, and preserving their traditional way of living. Climate change poses a severe threat to this sovereignty, making it imperative for Tuvalu to take proactive steps to secure its nationhood, culture, and human rights in the face of a changing climate. This includes efforts to address climate challenges, integrate traditional knowledge, and engage local communities to ensure Tuvalu's long-term survival and sovereignty.

7.2. Conditions for a Just Transition to Support Tuvalu's Sovereignty

The advocation that Loss and Damage finance should address both economic and non-economic losses and primarily be in the form of grants rather than loans was articulated by many interviewees and also supported by the documents (e.g., Representative from a Civil Society Organisation, PhD Researcher from Wageningen University, Environmental Lawyer, UN Economist, Richards et al. (2023)). According to Richards et al. (2023) discussions surrounding Loss and Damage finance should consider a yearly baseline of US$400 billion. Moreover, they propose that these financing principles should align with the Convention and the Paris Agreement, placing a strong emphasis on historical responsibility, respective capacity, the principle of polluters bearing the costs, equity, the provision of new, predictable, additional, sufficient, and precautionary funding in response to requirements, and reliance on the most current scientific knowledge (Richards et al., 2023).

Another strategy to ensure sovereignty over climate adaptation that emerged from the interviews revolves tailoring solutions to the country's unique circumstances and needs. This involves recognising the particular requirements of Pacific islands, acknowledging the constraints they face, and streamlining funding to suit their contexts. Quoting a UN Representative for Loss and Damage: "actually recognising the particular needs of Pacific islands and tailoring it around that". Tuvaluans' lived experiences should inform the solutions developed for their benefit.

Inclusive approaches are crucial to supporting Tuvalu's sovereignty. These approaches involve engaging local stakeholders, community leaders, and grassroots movements in decision-making. The traditional authority in Tuvalu, known as the "Fale kaupule" holds valuable traditional knowledge, and their participation is vital in addressing climate challenges effectively (Tuvaluan Government Official). In the consultation of local experts, "the number one thing is: Listen.", says a Pacific Island Researcher. To have successful projects, it is incremental to not only talk to the indigenous communities, but really "listen to those most affected" (Savarala, 2023), "to listen to our [Tuvaluans] stories" (Tuvaluan Negotiator). A Tuvaluan Researcher further illustrates the importance of local knowledge and engagement in preserving and shaping sovereignty:

> *"From generation to generations they [Tuvaluans] learn how to manage and how to survive using their knowledge from interaction with nature, interacting with the ecosystem that surrounds them. Understanding their ecosystem. […] The people have survived. People have survived for decades. We had the knowledge we know how to survive in harsh*

conditions, we know how to survive in very extreme weather conditions like cyclones and droughts and stuff like that [...] They know their islands more than anyone else" - Tuvaluan Researcher

Further, according to several interviewees (Pacific Island Researcher, Tuvaluan Government Official, UN Representative for Loss and Damage, Tuvaluan Negotiator), capacity building is essential for Tuvalu's sovereignty. Ensuring that Tuvaluans have the skills and expertise to access and utilise financial resources effectively is paramount. This involves training and technical support to empower local communities to address Loss and Damage on their terms (Pacific Island Researcher).

Another critical condition for a just transition that emerged from the interviews and documents is simplifying bureaucratic procedures. Ensuring that the grant application process for the Loss and Damage Fund is straightforward and accessible is crucial, as complex processes can hinder participation and only possible for a few individuals with specialised knowledge (Environmental Lawyer, PhD Researcher from Wageningen University, Richards et al. (2023), Bakhtaoui et al. (2023)). Streamlining the process would enable broader participation and enhance Tuvalu's capacity to access and utilise funds effectively. As stated by the Pacific Island Researcher: "Simplifying the process is knowing the grant amounts".

Consequently, the conditions for a just Loss and Damage Fund to support processes of sovereignty in Tuvalu are multi-faceted and require a comprehensive approach. Safeguarding Tuvalu's sovereignty involves tailoring solutions to its unique needs, fostering inclusivity, capacity building and simplifying bureaucratic procedures to empower Tuvalu to assert its sovereignty and ensure a just transition in the face of climate change.

7.3. International Support and Collective Efforts

Next to the conditions for a just Loss and Damage Fund, all interviewees mentioned the importance of international support and collective efforts. They argued that collective efforts are paramount in supporting sovereignty over climate adaptation, particularly concerning the Loss and Damage Fund. By working collaboratively on international platforms, nations can collectively advocate for policies, resources, and mechanisms that empower vulnerable countries like Tuvalu to maintain their sovereignty while addressing Loss and Damage. These joint endeavours help ensure a just and equitable global response to climate impacts, safeguarding the rights, cultures, and autonomy of nations facing existential threats.

The United Nations plays a pivotal role in supporting Tuvalu's sovereignty. While advocacy is a strength of the UN, its primary role is facilitating dialogue and cooperation among climate-vulnerable states. It can be a convener to ensure a common message and commitment to climate justice. As the UN Economist pointed out: "the greatest role that the UN can play is in bringing everyone to the table", indicating how the UN's involvement can be instrumental in safeguarding Tuvalu's sovereignty.

Activism is another force that can drive change. Climate activists, civil society organisations, and concerned individuals from developing and developed countries have a crucial role in pressuring donor governments to listen to Pacific islands and contribute to Tuvalu's sovereignty

(UN Representative for Loss and Damage). The Representative from a Global South-driven Grassroot Movement also said: “the first thing that we need to do is to build movements on campaigns where the global South is in the driving seat. Put the most affected peoples on the driving seat”. Thus, this collaborative effort transcends borders and aims to create a global common sense for climate justice and ending colonialism. Hence, to enable these conditions for a just Loss and Damage Fund, collective efforts, engaging with international organisations like the UN and leveraging activism is crucial.

7.4. Potential Actors for Driving the Loss and Damage Fund

In the quest to establish, implement and effectively manage the Loss and Damage Fund, the involvement of various stakeholders, both at the local and international levels, emerges as crucial. According to most interviewees, the national government of Tuvalu, should lead the development and deployment of Loss and Damage solutions in Tuvalu, with the capacity to involve relevant stakeholders based on the nation’s priorities (Environmental Lawyer, UN Representative for Pacific Island states; Pacific Island Researcher). Specifically, communities experiencing the daily realities of climate change should have a say in fund allocation. Their direct involvement can help address their specific needs effectively (UN Representative for Pacific Island states).

Furthermore, local stakeholders like Simon Kofe have been mentioned. Representing the realities faced by communities, he could offer valuable insights into how the fund can best serve the people on the ground (Pacific Island Researcher). Lastly, the traditional authority on each Tuvaluan island, represented by the ‘Fale kaupule’, was proposed, and they hold a wealth of traditional knowledge and wisdom. Involving them in fund-related decisions could ensure culturally sensitive and practical solutions (Tuvaluan Government Official).

Next, international associations such as SIDS or AOSIS (Pacific Island Researcher), as well as international organisations such as the Climate Vulnerable Forum (Pacific Island Researcher) or Greenpeace (Tuvaluan Negotiator) were mentioned. An influential figure in climate discussions, namely Ian Fry, was proposed, as his involvement could underscore the importance of seasoned advocates in pushing the Loss and Damage Fund’s agenda forward (Pacific Island Researcher).

Hence, a diverse range of international and local actors must collaborate to drive the establishment and effectiveness of the Loss and Damage Fund. Their collective efforts, informed by the unique challenges faced by Tuvalu and other affected nations, will be essential in addressing the complex issues of Loss and Damage resulting from climate change.

7.5. Financing Approaches for Addressing Loss and Damage

In the pursuit of financial support to address Loss and Damage, it becomes evident that various financing approaches are essential to mitigate the impacts of climate change. The interviewees (i.e., PhD Researcher from Wageningen University, Environmental Lawyer, Tuvaluan Negotiator) consistently highlighted the imperative need for financial resources to tackle Loss and Damage effectively.

The Global Shield[14] is one of such funding mechanism, which could support the Loss and Damage Fund. Global Shield, stemming from collaboration between G7 and V20 nations, is an initiative with a resilience-focused agenda aimed at addressing the fragmented climate and disaster risk financing landscape. Global Shield relies on a combination of insurance mechanisms, adaptive social protection systems, and the mobilisation of the finance sector. It places significant emphasis on public-private partnerships, climate and disaster risk modelling, and the use of advanced technologies like satellites (Mustapha & Williams, 2023). Despite recent discussions suggesting otherwise, Global Shield remains a vital player in the discourse surrounding Loss and Damage finance (Mustapha & Williams, 2023). However, concerns arise about the potential of Global Shield to divert attention from establishing a dedicated Loss and Damage Fund (PhD Researcher from Wageningen University). Historically, the developed countries' focus on insurance has raised scepticism among developing nations. To ensure effective collaboration, it is imperative to establish clear definitions and boundaries between the Loss and Damage Fund and Global Shield (Mustapha & Williams, 2023).

Numerous existing initiatives, programs, and funding instruments tailored to national circumstances exist, although many of them face significant funding gaps that hinder their effective operation at scale. These encompass a wide array of funding sources, instruments, and modalities, including national budgets, contingency funds, insurance instruments, debt instruments, and multilateral funds (UNFCCC, 2023a).

One avenue to achieve financial autonomy is by generating revenue from sources such as taxes on fossil fuels (Richards et al., 2023; Robinson et al., 2021). This approach not only reduces reliance on donor countries but also grants Tuvalu a more substantial say in fund allocation. The UN Representative for Pacific Island states emphasises this point, stating, "But if it's from, revenue sources such as taxes on fossil fuels, there might be a level of independence away from, obligations of the donor countries. So, there might be an opportunity to have a greater say in how that money is spent." This strategy aligns with the empowerment of Tuvalu to manage its resources independently.

Several other innovative financing mechanisms have been proposed to generate funds for climate finance and incentivise low-carbon investments. These include fossil fuel extraction levies, air passenger or ticket levies, universal mandatory levies on international shipping, windfall taxes, financial transaction taxes, buyback taxes, and wealth taxes. These schemes hold potential as funding sources for climate finance and incentives for environmentally conscious investments, ultimately directing revenues to the Loss and Damage Fund or related initiatives (Wemaëre et al., 2023).

Another trend is the inclination of countries to seek funding outside traditional UN processes. Many interviewees suggested to choose alternative or additional ways of financing (PhD Researcher from Wageningen University, Environmental Lawyer, UN Economist). This shift is primarily driven by the urgency of addressing Loss and Damage promptly rather than waiting for protracted UN negotiations. However, this might also slow down the process of establishing

[14] The Global Shield against Climate Risks is a collaborative effort between the G7 and V20 to enhance the financial security and resilience of at-risk nations and their populations (Global Shield against Climate Risks, 2023). Further information about the initiative can be found under: https://www.globalshield.org/.

a Loss and Damage Fund, as the PhD Researcher from Wageningen University notes "Countries going outside of the UN process because they don't have time to wait...[this] dilutes the process and even gives developed countries more leverage."

Consequently, the quest for financing solutions to mitigate Loss and Damage from climate change necessitates a multifaceted approach. While external funding and initiatives like Global Shield offer promise, existing programs face resource shortages. Innovative financing mechanisms, including levies and taxes, hold the potential to generate much-needed funds. However, their effectiveness hinges on careful coordination and clear definitions to prevent fragmentation and distraction.

7.6. Tuvalu's Proactive Approach

Tuvaluans are exemplars of a proactive spirit, epitomised by an array of innovative projects that demonstrate their resilience and unwavering commitment to combating climate change. They possess an intimate understanding of their environment and an unyielding dedication to preserving their homeland. As the PhD Researcher from Wageningen University notes, "there is no shortage in input and lack of knowledge and willingness to work on these issues from the communities themselves". This proactive ethos is palpable through a vibrant exchange of knowledge, a profusion of initiatives, and a shared resolve to safeguard their nation.

Next to playing a key role in advocating for the establishment of the Loss and Damage Fund, Tuvaluans have also established ambitious objectives that underscore their unwavering determination to confront the challenges of climate change head-on (Pacific Island Researcher). One of these goals revolves around Tuvalu's pursuit of renewable energy sources, with the primary objective of generating electricity through renewable means across all nine of its islands. They have already achieved significant progress, having reached approximately 20% of this milestone. Furthermore, Tuvalu is firmly dedicated to achieving a 100% reduction in GHG emissions within the electricity sector, aiming for nearly zero emissions by the year 2030. Their holistic strategy encompasses enhancing energy efficiency in Funafuti by 30% and striving for a substantial 60% reduction in the overall GHG emissions from the entire energy sector by 2030. Their overarching vision is to embark on a trajectory towards a zero-carbon development pathway by the year 2050 (Government-of-Tuvalu, 2020, 2022; SPREP, 2022).

Some smaller- scale initiatives were also mentioned during the interviews. For example, the removal of Sargassum algae, which, according to a Tuvaluan Negotiator, in Tuvalu, is seen as an opportunity rather than a nuisance. Tuvaluans recognise its potential value for composting and fertilising, offering significant benefits for agricultural production (Tuvaluan Negotiator). This approach demonstrates their capacity to transform challenges into opportunities. Furthermore, Tuvaluans have embarked on coral restoration projects, fully aware of the pivotal role coral reefs play in protecting their coastlines. Simultaneously, they are planting trees along the coast to counter soil erosion, all while leveraging new technology to document these efforts (Tuvaluan Negotiator). Additionally, women's handicraft groups have emerged as a means to revive traditional knowledge and empower women, celebrating Tuvalu's unique culture and fostering community resilience (Tuvaluan Negotiator, Tuvaluan Researcher). Tuvalu's commitment extends to its surrounding seas, where they have established marine protected

areas (Tuvaluan Government Official). In this endeavour, they harmonise science, technology, and indigenous wisdom to achieve success stories.

However, Tuvaluans are not content with merely being resilient; they are actively raising awareness about climate change and nurturing unity within their communities to effectively adapt to crises. Their multifaceted efforts encompass advocacy campaigns and community-building activities that empower individuals to comprehend climate change intricacies and actively participate in adaptation strategies (Tuvaluan Negotiator). As explained earlier, Tuvalu has made an effort to secure their language and culture under the UNESCO World Heritage Convention, thereby being the first country in the world to do that (UN Representative for Loss and Damage, Tuvaluan Negotiator).

Tuvalu's proactive stance extends to the very land they inhabit, as they actively explore the technical and legal aspects of elevating their islands to counteract rising sea levels. This ambitious endeavour mirrors their steadfast refusal to entertain the idea of leaving their homeland behind. Initiatives are already underway, such as the Tuvalu Coastal Adaptation Project, aimed at reclaiming land and fortifying their resilience against climate change impacts (Tuvaluan Researcher, Tuvaluan Government Official, Fainu (2023); Farbotko et al. (2023); Restall (2022); SPREP (2023)). The Tuvaluan Researcher further explains the land reclamation project, where "the government is trying to forge the new idea that, we try and raise our islands a little bit higher. So that people can continue on living on Tuvalu. Continue on practicing their culture and their cultural practices in Tuvalu. Not somewhere else".

Moreover, Tuvalu recognises the critical importance of preserving its cultural heritage and experiences, even in the face of potential displacement due to climate change. The concept of "Digital Tuvalu" seeks to digitise their cultural and socio-historical context—a contingency plan and a safeguard for their identity. As cited in Fainu (2023), Simon Kofe (Tuvalu's foreign affairs) further explains: "If we have a displaced government or population dispersed across the globe, we would have a framework in place to ensure that we continue to coordinate ourselves, continue to deliver our services, manage our natural resources in our waters and all our sovereign assets". It can be seen as a safety net for Tuvaluans unique culture, but for many Tuvaluans 'Digital Tuvalu' is only the last resort (Fainu, 2023). The Tuvaluan Government Official emphasises:

> *"Well, it's basically the last option for us? If we do go underwater, at least everything's digitised. We can hopefully set up somewhere else. God forbid that we need to do that but. I feel like it's a very theoretical - it's a great theory. I guess it's a great concept. Totally support it. I just hope we don't reach the reality where we will disappear, and we'll only have a digital Tuvalu." - Tuvaluan Government Official*

Similarly, an Tuvaluan interviewee as cited in Fainu (2023) stated: "Personally, I don't want to learn my culture from technology, from a metaverse, I want to learn it physically, on the land where I grew up, with the people that I grew up with, with the language that I speak every day". Hence, Tuvalu's ambitious goals, coupled with their proactive initiatives, epitomise their unwavering commitment to securing a future for their nation, culture, and people. Their story is one of resilience, innovation, and an unyielding spirit in the face of a changing climate.

7.7. Urgency for Action and Future Imperatives to Save Tuvalu

As Tuvalu confronts the existential threat of climate change, the urgency for immediate and decisive action has never been more apparent. As a Tuvaluan Negotiator stressed:

> *"There is no time for vacillation. There is no time for hesitation. It is not the time to wait. And we can't do anything if we don't act. We can't keep talking while people are losing their lives. We can't keep talking in this kind of meetings every year when mitigation is being really, really, really ignored." - Tuvaluan Negotiator*

These words encapsulate the prevailing sentiment among those who bear witness to the devastating impacts of climate change in Tuvalu and other vulnerable nations. Climate change is not an abstract concept; it is an immediate reality that leaves no room for delay or inaction. The interviewees as such emphasised that the international community must internalise this urgency and act accordingly. The Tuvaluan Negotiator further expressed that the climate change conferences serve as crucibles of knowledge and awareness, yet transformative action remains elusive:

> *"I don't think anyone that attends these meetings [Bonn climate change conference in June 2023] doesn't know what climate change really is and how it impacts the lives of the people, how it affects various ways of living. Maybe put themselves into our shoes. That if the world could not save Tuvalu for now, there would be no doubt. The world could also not be saved. Now is the time." - Tuvaluan Negotiator*

The recently published IPCC report offers a glimmer of hope, emphasising a limited window of opportunity to avert the worst of climate change. "We have to be more proactive as of now. The IPCC report that has just been published says that we still have time to commit to the Paris Agreement and to save Tuvalu.", stated the Tuvaluan Negotiator. This report provides a lifeline, a chance to take proactive measures to ensure Tuvalu's preservation. However, this opportunity is fleeting, and immediate and sustained action is imperative. As the UN Economist explained:

> *"So, it is when these [developed]countries actually start to realise the damage that is seen in Tuvalu and so on, that they will take climate change more seriously and come to the fore. So that's what you need unfortunately, for these things to happen, as long as it doesn't happen to me, then we just, we can pay lip service to it. But when it actually starts to affect your population and your country, then I think that's when things get a bit serious. The disadvantage there, though, is there's a possible trade off in the sense that. If it starts to affect developed countries, the money might not flow to developing countries, but actually flow inwards, for developed countries to mitigate climate change themselves. So there's a small I always say there's a small window. That SIDS and developing countries have to really make use of climate financing. And that window is predicated on how long it takes for climate change to show its face in developed countries." - UN Economist*

Consequently, this chapter highlights the critical conditions required for a just transition in Tuvalu, emphasising the preservation of sovereignty, the need for Loss and Damage finance in the form of grants, addressing both economic, and non-economic losses, tailored solutions to unique needs, inclusive approaches, capacity building, and simplified bureaucratic procedures. International support and collective efforts, with the UN and activism as key players, are essential. Various stakeholders, from local communities to international organisations, play a crucial role in establishing the Loss and Damage Fund. Financing approaches include innovative mechanisms and taxes on for example fossil fuels. Tuvalu's proactive initiatives,

such as renewable energy goals, land reclamation, and cultural preservation, demonstrate its resilience. The chapter underscores the urgent need for immediate action to combat climate change, driven by the reality facing Tuvalu and the global community at large. The interviewees stressed that the international community must heed the voices of those directly affected and internalise the moral and ethical imperative to act. While hope lingers in the IPCC report, it is not a substitute for determined and immediate action. As emphasised by Fainu (2023): “If we save Tuvalu, we also save the world.”

8. Discussion

8.1. Key Findings

In this chapter, the key findings of the thesis will be discussed in the light of literature, thereby, the concepts of climate colonialism and sovereignty will be addressed. Furthermore, as the issue of Loss and Damage in Tuvalu remains an ongoing concern, with evolving developments and changes occurring daily, the results of this thesis will also be discussed in the regard to new developments in the field. For this, it will be reflected on the key themes that arose from the interviews. First, 'Tuvaluans Culture, Sovereignty, and Fenua' will be discussed in response to the theme of: 'Loss and Damage in Tuvalu'. The second section encompasses 'Climate Colonialism and Power Dynamics' as a response to the theme of: 'Obstacles on the Path to a Loss and Damage Fund'. Third, 'Advancements around the Loss and Damage Fund' will be discussed in regard to 'Safeguarding Tuvalu's Future'.

8.1.1. Tuvaluans Culture, Sovereignty, and Fenua

Throughout the interviews with Tuvaluans, concerns about the potential loss of sovereignty in terms of statehood and territorial rights were expressed by all participants and were also a recurrent theme in the literature analysis among Loss and Damage. These findings are also supported by Saddington (2023) and Rothe et al. (2023), who have explored the implications of Loss and Damage in the Tuvaluan context. However, this apprehension may now face a new perspective following the recent redefinition of Tuvalu's statehood in their constitutional framework in October 2023. Specifically, the revised constitution proclaims that "the State of Tuvalu within its historical, cultural, and legal framework shall remain in perpetuity in the future, notwithstanding the impacts of climate change or other causes resulting in loss to the physical territory of Tuvalu" (Government-of-Tuvalu, 2023b). Furthermore, the updated constitution underscores that while the nation's territorial boundaries are conventionally delineated by fixed coordinates, these coordinates can be subject to alteration through parliamentary action (Government-of-Tuvalu, 2023b).

Furthermore, during the interviews, it became evident that fishing holds significant cultural importance for Tuvaluans, and that Tuvalu is committed to maintaining control over its waters, including valuable Exclusive Economic Zones (EEZs), aspects which are threatened by climate-induced Loss and Damage. To secure these rights, Tuvalu has also amended its constitution to assert the permanence of its maritime boundaries and seeks recognition from neighbouring countries for its EEZs (*Country of Tuvalu plans for its own disappearance from rising sea levels*, 2023; Government-of-Tuvalu, 2023b). Consequently, this refinement of Tuvalu's statehood challenges the traditional notion of sovereignty, detaching it from exclusive dependence on the physical territory, thereby, protecting the territorial aspect of sovereignty, which can be linked to the non-economic dimension of Loss and Damage. However, this change does not necessarily guarantee the preservation of the broader concept of sovereignty in regard to the indigenous concept of 'Fenua' and cultural identity.

According to the Tuvaluan interviewees, Tuvalu's sovereign identity is intricately woven into the fabric of their culture, indigenous practices, traditions, land, and sea. Tuvalu's foreign affairs, Simon Kofe further explained this on a broadcast about the redefined constitution.

There, he said: “For us a State is more than what is in the physical; it’s our culture, our history. It is the spirit of the people of Tuvalu, and that is something that could never be removed. It’s a part of who we are. And we want that to continue.” (Faa, 2023). There, the reoccurring theme of ‘Fenua’ comes into place, which illustrates the commitment between Tuvalu and their cultural and indigenous practices. While the word ‘Fenua’ was not explicitly mentioned in the interview or document analysis, it could be argued that it does convey itself in various forms. For instance, throughout all interviews with Tuvaluans, they mentioned the importance of their land, sea, people, culture, indigenous knowledge and practices, communal living, as well as the interrelation between them. Further, all official documents by the Tuvaluan Government, mentioned important indigenous concepts in Tuvalu, which referred to the interconnection between Tuvaluans and their land. As a consequence, it could be assumed that this concept of ‘Fenua’ resonates so deeply within Tuvaluans and is therefore so obvious, that they did not see the need to express it.

The deep connection to the environment underscoring the significance of ‘Fenua’ as a core element of Tuvaluans sovereign identity, is also something which has been researched by other scholars. For instance, Stratford (2013) and Rothe et al. (2023) demonstrated how ‘Fenua’ shapes Tuvalu’s distinctive sovereign identity and emphasises the interconnectedness of land, ocean, people, culture, and mobility in confronting climate change challenges. Similarly, as described by Saddington (2023) the Tuvaluan way of life underscores the significance of ‘Fenua’ and ‘Loto fenua’ (island loyalty), highlighting how these concepts illuminate the emotional bonds that transcend geographical boundaries and are integral to their cultural survival. However, as illustrated by the interviewees the impact of land degradation due to rising sea levels poses immediate threats to Tuvaluan livelihoods and sovereignty. According to Saddington (2023), this could give rise to hybrid identities that bridge home islands with their new settlements. However, as described by the Tuvaluan interviewees and also based on the findings from the analysed documents, many Tuvaluans residing in New Zealand or Australia, are losing their Tuvaluan identity after they migrated to a different country, which is also in line with other research (Shen & Gemenne, 2011). This observation highlights the potential vulnerability of ‘Fenua’ and ‘Loto fenua’ and stresses the importance of fully comprehending the emotional bonds it represents. It also prompts a thoughtful examination of whether offshore migration is primarily driven by employment, education, or training opportunities, or if it signifies an irreversible departure from lands that have become uninhabitable (Stratford, 2013).

During the interview and document analysis, the land reclamation project was mentioned, as a way to safeguard Tuvaluans land and adapt to Loss and Damage. Saddington (2023) and Rothe et al. (2023) also examined land reclamation in Tuvalu as a climate adaptation strategy. Saddington (2023) discussed how adaptation efforts in atoll states are shaped by geopolitical discourses and how these efforts, including land reclamation, challenge the notion of inevitable inundation, thereby highlighting the performative nature of adaptation and how it can influence the sovereignty of atoll states. Further, Rothe et al. (2023) illustrated how the land reclamation project, among other approaches, reflects Tuvalu’s determination to uphold its sovereignty and indigenous concept of ‘Fenua’ emphasising the interconnectedness between land, ocean, people, and identity within the context of a changing climate. This also aligns with the present

thesis, which emphasises the need for inclusive and innovative approaches to climate finance, tailored to the needs of Tuvalu. Furthermore, it provides an approach on how the money from the Loss and Damage Fund could be spend on land reclamation to safeguard Tuvalu.

Next to Tuvalu's land reclamation project, many other proactive approaches were mentioned throughout the interviews and documents used for the analysis (i.e., 'Digital Tuvalu' as part of the 'Te Ataeao Nei' - Future Now Project, and small-scale projects based on indigenous knowledge). Thereby, important indigenous concepts featuring culture, inclusivity and collectivism were used and emphasised, illustrating the importance of the non-economic aspects of Loss and Damage. This is also in line with other research, as well as present developments. For instance, at the 78th Session of the United Nations General Assembly in New York, Tuvalu called for international support to ensure the well-being, sovereignty, and survival of their nation. Thereby, they stressed the importance of collective action, inclusivity, and the Tuvaluan cultural principles of "kaitasi" and "falepili" – caring, sharing, being good neighbours, and leaving no one behind (*UNGA78: Seeking solutions not sympathy- Tuvalu PM Natano to 78th UN General Assembly*, 2023).

Moreover, as mentioned in the interview and document analysis, Tuvalu among other affected island states, was a driving force in advocating for the Loss and Damage Fund. Similarly, in September 2023, Tuvalu, along with other climate-affected countries, initiated a climate justice case by requesting the International Tribunal for the Law of the Sea (Itlos) to determine whether oceanic absorption of GHG should be considered pollution. If successful, this case has the potential to compel emission reductions and protect marine ecosystems affected by CO2 pollution (*Small island nations take high-emitting countries to court to protect the ocean*, 2023). This could help Tuvalu in safeguarding the nation from sea-level rise and other climate-related threats. Furthermore, it could potentially affect Tuvalu's sovereignty by influencing international agreements and regulations related to climate change, which may indirectly impact the nation's self-determination and its ability to address climate-induced challenges.

Consequently, from Tuvalu's unique perspective, valuable theoretical and conceptual insights can be learnt and impact international negotiations. Tuvalu's innovative approach to land reclamation as a strategy to adapt towards Loss and Damage, challenges the notion of inevitable inundation, highlighting the performative nature of adaptation and its influence on the sovereignty of Pacific Island states. The emphasis on inclusive and innovative approaches to climate finance resonates with Tuvalu's focus on addressing power structures and colonial legacies, promoting equitable outcomes for vulnerable global South communities. Moreover, Tuvalu's commitment to enduring statehood regardless of climate change impacts, its assertion of maritime boundaries, and the central role of 'Fenua' in its identity reflect a sophisticated understanding of sovereignty that emphasises the deep interrelation between the people, their culture, and their land. These insights provide a holistic understanding of sovereignty and Loss and Damage, with a special focus on the non-economic aspects, calling for the international community to revaluate policies and negotiations, emphasising the importance of culture, identity, and inclusivity in a rapidly changing climate landscape. Tuvalu's unique perspective thus serves as a catalyst for reshaping international climate negotiations and policies to be more equitable, responsive, and rooted in local knowledge and culture.

8.1.2. Climate Colonialism and Power Dynamics

During the interviews, participants consistently expressed their frustration with the extensive and highly bureaucratic nature of financial aid procedures, particularly highlighting concerns about the slow progress of the Transitional Committee regarding the establishment of the Loss and Damage Fund. There, the deliberate slowing of discussions, primarily by developed nations, has been criticised. This is something, which has also been pointed out by other sources. Concretely, critics indicated to be disappointed with the slow progress of the Transitional Committee, arguing that the latest meeting in October 2023 'failed' to deliver (*Loss & Damage Fund Meeting ends with no outcome as countries fail to agree on key aspects of the fund role*, 2023; Omorogbe, 2023; *STATEMENT: Loss and Damage Transitional Committee Fails to Reach Consensus Ahead of COP28*, 2023). Such a deliberate slowing of climate negotiations can be interpreted as a manifestation of climate colonialism, perpetuating an unjust power dynamic. Developed countries, often the largest historical GHG emitters, employ this strategy to obstruct discussions and delay meaningful resolutions, securing their influence and control over climate policies. This approach reinforces an inequitable distribution of responsibility, hindering progress in addressing climate change effectively, and disproportionately affecting vulnerable and less powerful nations.

This perpetuation of a climate colonialist agenda has also been addressed by Bracking (2019). Concretely, she explains how climate finance operates within existing power and colonial structures, thereby shaping the economic inequality. She further argues that international institutions (e.g., UNFCCC) therefore often do not deliver actual climate finance plans. Similarly, Perry and Sealey-Huggins (2023) explain how colonial legacies contribute to climate injustice and eco-imperial crises by leaving many Global South countries with structural disadvantages and vulnerabilities. Concretely, they elaborate how historical practices have made these countries more prone to the ecological and economic consequences of climate change. Further arguing that Global North governments, responsible for environmental degradation and colonial violence, have failed to acknowledge their historical responsibilities and provide sufficient support (Perry & Sealey-Huggins, 2023). This aligns with this thesis, emphasising the need to address inequalities and power imbalances in climate finance.

The recurring narrative of Tuvaluans having to repeatedly justify their need for financial aid and protection, a sentiment frequently echoed during the interviews, reflects an aspect of climate colonialism. Concretely, it underscores a power dynamic that perpetuates an unjust distribution of responsibility and relegate vulnerable nations to a subservient position in climate negotiations. This concern has also been described by Lynas (2004). He explained that sceptics posit that Tuvalu's environmental challenges, such as flooding and erosion, may be attributed to overpopulation, groundwater extraction, or sand mining, effectively placing the blame on Tuvaluans themselves for the struggles they are facing. However, it is important to note that erosion also occurs in uninhabited parts of the atolls, untouched by human activity, illustrating the undeniable influence of sea-level rise resulting from climate change (Lynas, 2004). This prevailing narrative of attributing blame to the affected population encapsulates a form of climate colonialism by unjustly burdening Tuvaluans for the environmental consequences imposed upon them.

Moreover, within the scope of the interviews and document analysis, the oversimplified portrayal of Tuvalu as merely a sinking nation has been met with criticism. This narrative is also prevalent in the literature. Notably, Tuvalu is frequently relegated to labels like 'Disappearing Tuvalu' (Lynas, 2004), or 'Sinking Tuvalu' (Falefou, 2017) sometimes characterised solely as a 'small' country (Ceccarelli, 2019), on the brink of becoming 'uninhabitable' (Falefou, 2017). While Tuvalu has partially used such classifications themselves to draw international attention to the struggles they are facing (Goldsmith, 2015), such an exclusively reductionist approach, not only diminishes Tuvalu's cultural significance but also erodes Tuvalu's agency in the global discourse on climate change (Farbotko et al., 2023). This perspective can be viewed as a manifestation of climate colonialism, undermining Tuvalu's agency and further contributing to its marginalisation, impeding its potential, and stifling its representation in global climate discussions, thus reinforcing an unjust power dynamic in climate negotiations.

As outlined in the theoretical framework, there is a diverse range of terminologies to address the ongoing marginalisation of developing countries, particularly within the environmental context of colonialism (Ramirez et al., 2023; Stoll, 2018; Whyte, 2017; Zografos & Robbins, 2020). While this thesis predominantly employs the term climate colonialism (Zografos & Robbins, 2020), interviewees frequently referred to these issues as colonialism or colonial structures, regardless of whether they were discussing historical practices or contemporary forms of marginalisation. Similarly, scholars have utilised different terms to describe the persistent historical power imbalances and inequalities in the realm of climate change. For instance, Ramirez et al. (2023) refers to these structures as green colonialism, whereby Babie (2010) classifies them as eco-colonial structures. Similarly, Stoll (2018) frames them as environmental colonial structures, and Whyte (2017) describes them as climate change colonialism. Although subtle distinctions exist among these definitions, they all refer to the various manifestations of power dynamics, exploitation, or dominance exerted by developed countries over climate, environmental, and sustainability issues, often at the expense of vulnerable communities.

Within the Tuvaluan context, the enduring phenomena of exclusion, marginalisation, and climate colonialism have been frequently emphasised both in the interview records and documents. While this topic was included in the interview guide, many interviewees came up with the topic themselves before related questions were raised, illustrating the prominence of colonialism in Tuvalu. This perspective aligns with the observations made by scholars who categorise the marginalisation of Pacific Island states and the prevailing power dynamics within the international policy arena as unjust colonial dynamics (Bordner et al., 2020; Hau'Ofa, 1994; Williams, 2000). Next to the domination by Western countries in climate negotiations and financing schemes (Farbotko, 2022), certain propositions, such as the notion of trading sovereignty for Australian citizenship, also underscore the continuity of colonial practices (Dobell, 2019). Moreover, a comprehensive review of the existing literature reveals that primarily Pacific Island scholars (Bordner et al., 2020; Hau'Ofa, 1994; Williams, 2000), NGO's (CAN, 2022), Grass root movements (ActionAid, 2023), and journalists (Ruwayda, 2023; Savarala, 2023) identify these colonial and unjust structures, emphasising the responsibility of the developed world. In contrast, many international organisations, (e.g., the UN), seldom

reference ongoing colonial structures. However, this might change in the future, as exemplified by the recent mention of colonialism in the IPCC report this year (Lee & Romero, 2023).

In summary, the interviews and document analysis have highlighted various facets of climate colonialism and marginalisation in Tuvalu. The deliberate bureaucratic obstacles and slow progress in climate negotiations and the establishment of the Loss and Damage Fund, often dominated by developed nations, perpetuate unjust power dynamics, disproportionately impacting vulnerable countries. Furthermore, the recurring narrative of justifying the need for financial aid and attributing environmental challenges to the affected populations reflects forms of climate colonialism. This perspective aligns with a broader understanding of climate colonialism and related terms. Together, these concepts emphasise the need to address inequalities and injustices in climate policies and negotiations to empower Tuvalu.

8.1.3. Advancements around the Loss and Damage Fund

Throughout the interviews, it was stressed that the Loss and Damage Fund should not only address monetary aspects but also non-monetary aspects. A narrative also supported by other researchers (Achampong, 2023; Chandra et al., 2023). Furthermore, in the fourth meeting from the Transitional Committee (TC4), there seemed to be a widespread agreement that the fund will indeed address economic and non-economic induced losses and damages, resulting from both extreme and slow onset weather events (Roesch & Franczak, 2023). Similarly, throughout the interviews it has been proposed that the Loss and Damage Fund has to come in grants, be tailored to the needs of the country, as well as support processes of capacity-building. These conditions have also been proposed by Smith (2023). Moreover, the interviewees emphasised the importance of avoiding the pitfalls observed in previous initiatives, such as the Green Climate Fund. This sentiment finds reinforcement in the findings of Roesch and Franczak (2023), who expound on recurring issues related to governance, funding sources, and the Fund's location. They argue that it is vital for the Loss and Damage Fund to draw valuable lessons from the institutional framework and experiences of the Green Climate Fund, particularly in enhancing accessibility for developing nations and securing concrete commitments from developed countries (Roesch & Franczak, 2023).

The topic of historical responsibility emerged as a central theme in all interviews, with participants emphasising the primary obligation of developed nations to contribute financially to the fund. This viewpoint aligns with the proposals put forth by scholars like Wyns (2023) and Fanning and Hickel (2023). Richards et al. (2023) suggested a minimum annual contribution of US$400 billion per year. However, it seems that developed countries are pushing against this. Further, no country has pledged to provide initial capital for the fund, exacerbating the prevailing mistrust between the Global North and South within the Transitional Committee (Roesch & Franczak, 2023). Notably, interviewees who attended the Bonn climate change conference in June 2023 reported significant disagreements between developed and developing nations during discussions on Loss and Damage. This discord appears to persist, as evidenced by recent meetings of the Transitional Committee, which featured disputes on matters such as the fund's hosting location, its financial resources, and eligibility criteria for nations. As a consequence of these unresolved issues, an additional meeting has been scheduled to facilitate further discussions and seek common ground

(Omorogbe, 2023; Roesch & Franczak, 2023; *STATEMENT: Loss and Damage Transitional Committee Fails to Reach Consensus Ahead of COP28*, 2023).

Consequently, the expectations for COP28 are high. In line with the interviewees responses, Roberts (2023) argues that COP 28 should include a roadmap for advancing political messages and increasing action and support for Loss and Damage. Further, it should acknowledge the need for significant annual funding, including $400 billion for Loss and Damage, and outline strategies for mobilising these funds. The decision must also address gaps and requirements for Loss and Damage, mitigation, and adaptation to limit global warming to below 1.5°C (Roberts, 2023). As a novel development, Achampong (2023) further suggests including Loss and Damage in the New Collective Quantified Goal on Climate Finance[15]. This formal connection between the Loss and Damage Fund and UNFCCC's climate finance objectives would support funding for addressing Loss and Damage, establish 'a measurable, minimum financing amount' and secure a commitment from Global North countries to provide and be accountable for financing these efforts (Achampong, 2023)

8.2. Limitations

One notable methodological limitation is the exclusive use of online interviews, conducted solely in English. This approach was necessitated by logistical constraints, the inability to speak Tuvaluan, and the dispersion of Tuvaluans across different regions (e.g., Tuvalu, Fiji, New Zealand, Australia, to name a few (Shen & Gemenne, 2011)). However, it is important to recognise that these limitations may have introduced certain biases and constraints to the research process. The choice of conducting interviews exclusively in English could be seen as a limitation, given the historical significance of English as a colonial language (Pennycook, 2002) in Tuvalu (Goldsmith, 2012). Furthermore, in the English language, certain meanings, and expressions, particularly those deeply rooted in indigenous concepts like 'Fenua' may encounter challenges in terms of comprehensive explanation, whereas in Tuvaluan, these nuances can be more effectively conveyed. Consequently, conducting interviews in Tuvaluan, the local language, would have allowed for a more culturally authentic and nuanced exploration of participants' perspectives, potentially revealing deeper insights. Nevertheless, English was the only language that both parties spoke and therefore chosen for this thesis. Furthermore, the reliance on online interviews, introduced potential limitations related to access, digital literacy, and the ability to foster open and candid discussions. It also prevented the researcher from fully immersing themselves in the physical context of Tuvalu, which could have enriched the depth of understanding.

Additionally, the research faced challenges in accessing Tuvaluans directly affected by climate change impacts. Concretely, only four of the twelve interviewees were from Tuvalu. As a result, the thesis primarily engaged with outsiders, which may not fully represent the diversity of viewpoints within Tuvalu. It is essential to acknowledge that Tuvaluans living outside the country's borders, while well-connected and influential, might also have different experiences

[15] The New Collective Quantified Goal on Climate Finance (NCQG) is the new global climate finance target within the UNFCCC and will replace the current global climate finance goal of $100 billion starting in 2025 and beyond (Achampong, 2023).

and perspectives compared to those residing in Tuvalu itself (Shen & Gemenne, 2011). Furthermore, it is crucial to recognise the limited scope of the perspectives represented. The interviews with people from Tuvalu predominantly featured individuals from academic, NGO, and governmental sectors. A gap in insights from Tuvaluan citizens from all islands within Tuvalu and those who have migrated to countries like Australia and New Zealand remains. While these perspectives have been partially represented in the analysed documents, no in-depth insights were given.

Additionally, throughout this thesis, the focus is on 'Tuvaluan sovereignty', there, it is important to acknowledge that treating Tuvalu or Tuvaluans as a homogenous entity may oversimplify the complex and diverse range of experiences and perspectives within the Tuvaluan community. Concretely, the diverse geography (Census, 2017), urban-rural distinctions, uniqueness of each island (Government-of-Tuvalu, 2023a), generational differences, and the influence of migration (Shen & Gemenne, 2011) all contribute to the complex and multifaceted nature of Tuvaluans identity and perspectives, challenging the notion of a singular, homogenous entity when discussing matters like sovereignty.

Furthermore, as briefly mentioned in the Methodology chapter, the thick description approach also faces limitations, specifically in regard to validity (Maxwell, 2010) and potential subjectivity (Patton, 1990). While efforts were made to mitigate these limitations by incorporating a wide array of perspectives and document sources and aiming to keep an open perspective, it is important to acknowledge that some limitations persist, primarily pertaining to the researcher's subjectivity. Specifically, the researcher's positionality as a White Western individual may have influenced the research process and interpretation of findings, despite efforts to mitigate biases.

These aspects of the thesis' limitations underscore the importance of future research[16] exploring these issues with a more diverse range of data collection methods, deeper engagement with Tuvaluan communities, and a more comprehensive examination of language and culture to provide a holistic understanding of the subject matter.

[16] Concrete recommendations for future research can be found in the next chapter.

9. Conclusion and Future Research

9.1. Conclusion

The aim of this research was to critically assess the relation between the new Loss and Damage Fund and Tuvalu's sovereignty. Thereby, existing power dynamics and climate colonial structures were identified, and it was investigated how these affect this relation. In this section, the sub-questions are being addressed, followed by the main research question.

The first sub-research question was: 'How do Tuvaluans define Loss and Damage, and what do they identify as the most crucial element for Tuvalu in this debate?'

Tuvaluans define Loss and Damage in a multifaceted manner that transcends traditional notions of environmental harm. For them, it encompasses the imminent existential threats posed by climate change, including sea-level rise, extreme weather events, and the erosion of their homeland. It extends to the disruption of their cultural heritage, indigenous practices, and social fabric. It also carries the weight of potential loss of sovereignty, as their very existence as a nation is at stake. Further, the question of relocation looms large and Tuvaluans expressed their concerns of losing everything, if they do have to leave. The urgency for action is underscored by their passionate calls for immediate measures, stressing that there is no time for hesitation. This urgency reflects the belief that mitigation efforts have been largely ignored, and further delay is unacceptable. Consequently, climate-related displacement and cultural loss can be identified as the most crucial element for Tuvalu in this debate.

The second sub-research question asked: 'Which Tuvaluan actors could be involved in the Loss and Damage Fund, and how might they impact the fund?'

Potential Tuvaluan actors involved in the Loss and Damage Fund encompass the national government, local communities, and traditional authorities, such as the 'Fale kaupule'. Through their local expertise, they could give concrete recommendations on what kind of projects are needed, how the money could be spent and identify areas where they require assistance. Their collective engagement aims to prioritise Tuvalu's unique challenges and needs in addressing Loss and Damage due to climate change. Additionally, international associations and organisations, can advocate for Tuvalu's interests on the global stage. Collaboration among these diverse actors is pivotal for the fund's effectiveness in safeguarding Tuvalu from climate-induced Loss and Damage. In sum, local experts within Tuvalu could be essential for tailoring the fund to Tuvalu's needs.

The third sub-research question was: 'In what ways, if any, do climate colonial structures influence the implementation of the Loss and Damage Fund?'

The implementation of the Loss and Damage Fund occurs within the context of global governance structures marked by historical power imbalances and climate colonialism. These structures have historically favoured developed nations and perpetuated disparities in addressing climate change. While efforts have been made to rectify historical injustices and promote equitable participation, challenges remain. Developed nations still wield significant power within international climate negotiations, affecting the fund's allocation and distribution of resources. Further, the power of developed countries in postponing meetings and thereby slowing down the process of establishing the fund is a huge barrier. Additionally, there are

concerns that climate financing may be subject to conditionalities that could impede Tuvalu's sovereignty in determining its climate adaptation strategies. These challenges highlight the need for continued advocacy to dismantle colonial structures and ensure the fund operates fairly and equitably. Consequently, climate colonial structures and the resulting power dynamics can limit the effectiveness as well as the establishment of the Loss and Damage Fund.

The fourth sub-research questions discussed: 'What are the conditions for the Loss and Damage Fund to support Tuvalu's levels of sovereignty in making decisions on climate change adaptation?'

Several conditions are important for the Loss and Damage Fund to strengthen Tuvalu's sovereignty in climate change adaptation. Firstly, it is imperative that Loss and Damage financing is new, additional, predictable, addresses both economic and non-economic losses, comes in grants and considers a baseline of US$400 billion per year. Secondly, initiatives funded by the Loss and Damage Fund must be explicitly tailored to address Tuvalu's unique vulnerabilities and needs. This ensures that Tuvalu retains control over its adaptation strategies. Thereby, it should integrate Tuvalu's cultural heritage and traditions, as well as incorporate indigenous knowledge and practices. Third, the involvement of Tuvaluans in decision-making processes is crucial. Fourth, capacity building programs must be integrated to empower Tuvaluans to take the lead in climate adaptation efforts. This strengthens their sovereignty by reducing dependence on external actors. Lastly, simplifying access barriers in the Loss and Damage Fund and reducing bureaucracy is paramount in ensuring that vital resources and support reach Tuvaluans in times of need. Hence, new, additional, predictable, economic, and non-economic losses, grant-based, tailored, and inclusive approaches, including Tuvaluans culture and indigenous practices, as well as supporting capacity building and simplifying bureaucratic procedures are needed to empower Tuvalu to assert its sovereignty and ensure a just transition in the face of climate change.

The main research question was: 'In what ways does the implementation of the Loss and Damage Fund shape Tuvalu's levels of sovereignty in making decisions on climate change adaptation?'

The overarching research question encapsulates the complex dynamics at play. Throughout the analysis, it becomes clear that the implementation of the Loss and Damage Fund has both positive and challenging implications for Tuvalu's sovereignty. While the fund aims to enhance self-determination over adaptation efforts, the practical implications may not be as straightforward. Tuvalu's ability to influence the fund's decision-making processes and ensure that its unique needs are met remains uncertain. International politics and power dynamics may limit Tuvalu's agency in determining the allocation and utilisation of fund resources, especially when larger, more influential nations have a significant say in fund governance.

Similarly, while it seems like there is a consensus on also addressing non-monetary aspects in the Loss and Damage Fund, such as culture, heritage and indigenous practices, there is a need for a closer examination of whether these commitments are being effectively implemented. Indigenous knowledge and practices are deeply rooted in their connection to the land and sea, their 'Fenua', and are essential in their ability to adapt to climate change. However, their preservation and integration into climate adaptation measures may not receive the attention they

deserve. Furthermore, the Loss and Damage discourse, often driven by a focus on economic compensation, may overshadow the importance of indigenous practices, potentially undermining Tuvalu's sovereignty in preserving its cultural and societal identity.

Regarding territorial rights, the acknowledgment of Tuvalu's maritime boundaries is critical, but it raises questions about how these rights will be enforced and protected, through the Loss and Damage Fund. Maintaining territorial sovereignty over Tuvalu's waters is not just a matter of recognition but requires effective projects in safeguarding the land. In regards to the Loss and Damage Fund, there were no concrete discussions on how to enable territory rights, but through the financial support of projects like the land reclamation project, Tuvalu's land could be secured and thereby, the territorial rights over Tuvalu could be safeguarded.

Lastly, Tuvalu's proactive strategy is commendable. They played a key role in advocating for the fund. But also, beyond the Loss and Damage Fund arena, they are actively engaged in various initiatives such as the 'Te Ataeao Nei'- Future Now Project, Digital Tuvalu, land reclamation, and small-scale indigenous projects, showcasing their resilience and determination. Their participation in international policy forums, efforts to safeguard their cultural heritage through UNESCO, and the adaptation of their constitution further demonstrate their commitment to securing their sovereignty. Thus, Tuvalu's multifaceted approach highlights their agency and resilience in the face of climate challenges. However, their impact on regaining agency is contingent on the responses of other nations and the global community.

In conclusion, while the Loss and Damage Fund holds the potential to enhance Tuvalu's sovereignty in climate adaptation, its practical implications are complex and uncertain. To ensure that it genuinely empowers Tuvalu, it is imperative to critically evaluate the fund's implementation and its actual impact on self-determination, indigenous practices, territorial rights, and agency in shaping climate resilience.

In line with a commitment to respecting Tuvaluans' agency and preventing any potential concerns of appropriation, this study consciously refrains from offering an all-encompassing set of policy recommendations in this chapter. Instead, it is hoped that the preceding conclusion has already provided sufficient direction for these recommendations. Further, in the next section, recommendations for future research are presented, serving as an informative resource for future discussions.

9.2. Future Research

This thesis has shed light on key facets of Loss and Damage in Tuvalu, contributing to the grasp of the challenges faced by its people. Nevertheless, numerous unexplored research paths exist, offering opportunities for a more thorough and comprehensive understanding of these issues and their consequences.

- Future research could delve into the psychological impacts of leaving one's homeland or the looming prospect of displacement due to climate change-related factors. The emotional and psychological toll on Tuvaluans forced to leave or facing the potential loss of their homes and cultural heritage is a crucial area for exploration. This research could investigate how individuals and communities cope

with such challenges and how they maintain their cultural identity in the face of displacement.

- Tuvalu has acceded to the UNESCO World Heritage Convention. Therefore, an intriguing avenue for future research involves examining the effects of this designation of Tuvalu’s culture and identity as world heritage. Given the unique cultural practices, language, and traditions of Tuvaluans, there is a growing interest in preserving these aspects in the face of climate-induced threats. Investigating the implications of designating Tuvalu’s culture as world heritage, along with its potential impact on conservation efforts and international recognition, could be a valuable area of study.
- Moreover, future research should prioritise a more comprehensive exploration of Tuvalu's complex perspectives. This includes a more diverse sample, conducting interviews with individuals from various backgrounds, including Tuvaluans from all eight inhabited islands, different age groups, and Tuvaluans who have migrated to different countries (e.g., Australia and New Zealand). Further, it is proposed to conduct interviews or surveys in the Tuvaluan language, allowing for a more culturally authentic and nuanced exploration.
- Tuvalu possesses a wealth of indigenous knowledge and adaptation strategies that have been developed over generations in response to climate-related challenges. Future research, together with Tuvaluans, can explore these indigenous practices and their effectiveness in mitigating Loss and Damage. This research could provide valuable insights into how indigenous knowledge can complement modern adaptation efforts and contribute to the resilience of Tuvalu’s communities.
- Further, conducting a comprehensive assessment of climate impacts on Tuvalu, considering various sectors such as agriculture, infrastructure, health, and culture, is crucial. Such research can provide a holistic understanding of the multifaceted challenges faced by Tuvaluans, enabling more targeted and effective policy responses.
- Comparative studies with other island nations facing similar climate challenges can yield valuable insights. Examining how different nations respond to Loss and Damage and adapt to climate change can provide a broader perspective on effective strategies and potential pitfalls.

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11. Appendices

11.1. Appendix A: Interview Guide

Theme	Potential Questions
Theme 1: Tuvalu and Loss and Damage	
Main Question(s):	- How do you personally define Loss and Damage in the context of climate change in Tuvalu?
	- In your opinion, what is the most crucial element for Tuvalu in this debate (surrounding Loss and Damage due to climate change)?
	For Tuvaluans: In your experience, how has Tuvalu been affected by climate change? How have you/ local communities witnessed changes in your/ their environment, natural resources, traditional practices, or cultural systems due to climate change? How does this relate to the concept of 'Loss and Damage' (L&D)? How have these experiences shaped your understanding of the most significant aspects in the Loss and Damage debate?
Potential Tailored/ Follow-up questions:	- In your opinion, are there any parts within Loss and Damage that are often overlooked in regard to Tuvalu? If so, which ones?
	- Besides monetary aspects of Loss and Damage, which role do non-monetary aspects play?
	- Do cultural values, indigenous knowledge/ practices and identity play a role in Tuvaluans' understanding of Loss and Damage? If so, how?
	- Which Tuvaluan stakeholders do you see playing a key role in addressing Loss and Damage?
	- How do these Tuvaluan stakeholders engage in addressing Loss and Damage? (e.g., specific forms of engagement, their participation in meetings, and other relevant details regarding their contributions?)
	- How might their [Tuvaluan stakeholders] (active) involvement influence the outcomes of climate change adaptation decisions and contribute to Tuvalu's sovereignty?

Theme 2: Barriers in the Loss and Damage Fund	
Main Question(s):	-What are the key challenges faced by local(s) stakeholders in implementing initiatives related to climate adaptation and addressing Loss and Damage in Tuvalu?
Potential Tailored questions:	- What challenges and barriers exist in integrating indigenous knowledge with external climate change interventions or policies, and how can these be addressed to ensure the recognition and preservation of indigenous knowledge?
	- How do you perceive the responsibility of the international community in addressing Loss and Damage in Tuvalu?
Theme 3: Impact on Tuvalu's Self-Determination and Sovereignty in LDF/ L&D	
Main Question(s):	- How might the new Loss and Damage Fund impact Tuvalu's levels of sovereignty in climate adaptation decision-making?
	- What are the critical conditions that need to be met for the new Loss and Damage Fund to effectively support Pacific Island states such as Tuvalu in maintaining its sovereignty and making informed decisions on climate change adaptation?
	For Government Representatives: How do you perceive the balance between international climate funding mechanisms and Tuvalu's autonomy in decision-making? How can Tuvalu ensure its priorities and cultural values are reflected in the implementation of the Loss and Damage Fund? *For NGOs*: How does your organisation contribute to addressing Loss and Damage in Tuvalu, and what specific initiatives or projects are you involved in? How do you collaborate with other stakeholders and influence the development and implementation of the Loss and Damage Fund? Based on your involvement in [], how can it contribute to driving global action on Loss and Damage/ address Loss and Damage in Tuvalu?

Potential Tailored questions:	- What strategies can Tuvalu adopt to maintain its sovereignty and effectively influence the direction of climate adaptation under the Loss and Damage Fund?
	- How can Tuvalu balance the need for external financial support through the Loss and Damage Fund while maintaining control over decision-making processes?
	- What mechanisms or strategies can Tuvalu implement to ensure that the Loss and Damage Fund aligns with its national development priorities and long-term goals?
	-How can Tuvalu engage in meaningful and inclusive consultations with its citizens to ensure their voices are heard in shaping the direction of climate adaptation?
	- How/ In what ways can Tuvaluans cultural values, indigenous/ traditional knowledge and identity play a role in the Loss and Damage Fund?
	-In what ways/how can international partnerships and collaborations support Tuvalu in their sovereignty over climate adaptation?
Theme 4: Influence of Climate Colonial Structures in LDF/ L&D	
Main question:	- Are there any historical or contemporary (climate) colonial structures that might influence the implementation of the new Loss and Damage Fund in Tuvalu? Which are those?
	- How can these structures be identified and addressed to ensure equitable and just distribution of resources and decision-making authority?
	For Researchers and Experts: How have past colonial relationships impacted the power dynamics and decision-making processes related to the Loss and Damage Fund in Tuvalu? How can these structures be identified and addressed to ensure equitable and just distribution of resources and decision-making authority?

Potential Tailored questions:	- How have past colonial relationships influenced power dynamics and decision-making processes related to climate adaptation in Tuvalu? Are there specific structures that have played a significant role in shaping these dynamics?
	- How might these climate colonial structures impact the implementation and effectiveness of the Loss and Damage Fund in Tuvalu?
	- How can Tuvalu navigate and mitigate the potential influence of climate colonial structures on the Loss and Damage Fund?
	-How can the international community support Tuvalu in addressing the historical legacies and power imbalances that may perpetuate climate colonial structures?
	-Are there any best practices or lessons learned from other countries or regions that could inform Tuvalu's approach in navigating the influence of climate colonial structures?
	-How can Tuvalu promote indigenous knowledge, traditional practices, and local decision-making processes within the framework of the Loss and Damage Fund?
Potential Common Questions	
	- How would you describe the current state of climate adaptation in Tuvalu, considering the challenges and progress made so far?
	- What are the key challenges and opportunities for Tuvalu in regaining control over climate adaptation and addressing Loss and Damage?
	- Do you have any recommended reports or articles that provide relevant information on climate change adaptation, Loss and Damage, or the specific challenges faced by Tuvalu? If so, could you please share them with me?
	- Are there any other individuals or experts in the field whom you would recommend I investigate for further insights?
	- Are there any other important things that you would still like to mention or add?

11.2. Appendix B: Informed Consent Form

Statement of Informed Consent

Research Study Title: A Critical Analysis of the New Loss and Damage Fund (not final yet)
Researcher Name: Elena Niehoff
Supervisors Name: Ingrid Boas

Description of the study
You are being asked to take part in a study. This is a study about the potential of the Loss and Damage Fund in strengthening Tuvalu's sovereignty over climate adaptation. The purpose of this interview is to gain insights and perspectives on climate change and its impacts on the Pacific Island countries, specifically in relation to Loss and Damage as well as adaptation in Tuvalu.

You are being asked to participate because of your knowledge in the above-mentioned area.

You will be asked to participate in an interview. It will take about 30-60 minutes to complete. Before signing, please read this form and ask any questions.

Risks and Benefits of Being in the Study
This study poses little risk to you. You may stop participating and answering the questions at any time. There are no direct benefits to you from taking part in the study. Your input will be important to a research project and potentially publications by improving our knowledge of Loss and Damage in regard to Pacific islands, specifically Tuvalu. Your input is important to this discussion.

Confidentiality
- The data derived from this study may be used in education, student projects and published in academic journal article(s) but you will not personally be identified without your consent.
- With your consent, the interview will be audio recorded.
- With your consent, information can be quoted in research outputs.

Voluntary Nature of the Study
We thank you very much for your participation. Your decision to participate is completely voluntary. You may choose not to answer any part of the study or stop taking part at any time without any penalty to you.

Right to Erasure:
I understand that I am entitled to have the abovementioned information destroyed at my request, both during the research and while in storage, in line with the GDPR's right to erasure provision.
☐

Contacts and Questions

If you have any questions, concerns please contact Elena Niehoff [elena.niehoff@wur.nl]. If you have additional questions regarding your rights as a research participant, please contact the Wageningen University and Research Scientific Integrity Committee at cwi@wur.nl .

☐ Yes, I would like to take part in the research.

☐ No, I would not like to participate in the research.

Please print your name: ____

Date:

Signature:

____

Recording Permission

I have been told that audio recordings may be taken during my participation but that these recordings **are not for publication**. I have been informed that I can ask that the recording be turned off at any time. The data derived from this study may be used in education, student projects and published in academic journal article(s). Small excerpts from the interview can be used in text in the form of quotes but I will not and cannot be personally identified.

I agree to be audio recorded under the above stated conditions.

☐ Yes

☐ No

Signature:

____

To be filled in by the researcher registering consent:

Date:

Signature:

11.3. Appendix C: List of Interviewees

Experts	Referred Names	Profession/ Expertise	Date of the Interview	(Not) recorded
1	Pacific Island Researcher	Pacific Island Researcher specialised in Loss and Damage	29.05.2023	Recorded
2	Tuvaluan Government Official	Tuvaluan Government Official	31.05.2023	Recorded
3	UN Representative for Loss and Damage	UN Representative specialised in Non-Economic Loss and Damage	01.06.2023	Recorded
4	Tuvaluan Researcher	Tuvaluan Researcher specialised in indigenous knowledge	02.06.2023	Recorded
5	UN Representative for Pacific Island states	UN Representative specialised in the area of Pacific Island states	09.06.2023	Recorded
6	Representative from a Global South-driven Grassroot Movement	Representative from a Global South-driven Grassroot Movement advocating for a just transition	13.06.2023	Recorded
7	Environmental Lawyer	Environmental Lawyer in the field of Loss and Damage and Pacific Island states	21.06.2023	Recorded
8	PhD researcher from Wageningen University	PhD researcher from Wageningen University specialised in the field of climate finance	27.06.2023	Recorded
9	Representative from Civil Society Organisation	Representative from Civil Society Organisation and Researcher in the field of Loss and Damage	28.06.2023	Recorded
10	Tuvaluan Representative from an NGO	Tuvaluan Representative from an Non-Governmental Organisation (NGO)	28.06.2023	Not recorded
11	UN Economist	UN Representative specialised in economics	29.06.2023	Recorded
12	Tuvaluan Negotiator	Tuvaluan Negotiator and Activist	10.07.2023	Recorded

11.4. Appendix D: List of Documents Used in the Analysis

Docs	Type of Document	Author(s) (Year)	Title	Short summary/ Scope of the publication
1	Report	SPREP (2022)	Tuvalu state of environment report 2022	The report evaluates the environment across four thematic areas and incorporates quantitative data and stakeholder input to analyse key drivers, environmental pressures, current conditions, and responses, offering future recommendations for Tuvalu.
2	Report	AOSIS (2023)	Finance: Loss and Damage Funding Arrangements- Scope of Funding arrangements& envisioned outcomes for the TC four areas of work	The report is a submission to the Transitional Committee, where AOSIS makes suggestions regarding the scope of the Loss and Damage Fund as well as discusses the envisioned outcomes for the process of the Transitional Committee.
3	Report	Bakhtaoui, I., Naushin, N., Shawoo, Z., Afsara, B. M., Iqbal, S. M. S., & Hossain, Md. F. (2023)	Operationalizing the Loss and Damage Fund: Learning from the Intended Beneficiaries	The report highlights the establishment of the new Loss and Damage (L&D) fund at COP27 and offers recommendations for its effective operationalisation, drawing insights from potential beneficiaries in the Global South, particularly vulnerable communities facing climate-induced losses and damages.
4	Report	Earth Negotiations Bulletin (2023)	Summary of the Bonn Climate Change Conference: 5-15 June 2023	The report provides a summary of the Bonn Climate Change Conference in June 2023, highlighting key issues and challenges faced by delegates in preparation for the 28th Conference of the Parties (COP) in Dubai.
5	Report	ActionAid (2023)	The Vicious Cycle: Connections Between the	The report discusses the interplay between climate change and the debt crises in vulnerable countries, emphasising the paradox of climate finance

			Debt Crisis and Climate Crisis	arriving mainly as loans that worsen debt issues and calling for fairer and more sustainable funding solutions.
6	Report	Government-of-Tuvalu (2022)	Updated Nationally Determined Contribution (NDC)	The report discusses Tuvalu's Updated Nationally Determined Contribution (NDC) under the Paris Agreement, outlining specific emissions reduction targets and a zero-carbon development pathway.
7	Governmental Document	Government-of-Tuvalu (2020)	Te Kete - Tuvalu National Strategy for Sustainable Development 2021-2030	The document outlines Tuvalu's strategic approach to sustainable development, emphasising an inward focus on local potential, resource optimisation, and human capital for sustainable livelihoods.
8	Short report/ case study	Restall, S. (2022)	Land reclamation & replenishment at Funafuti island, Tuvalu	This case study is about the coastal and climate change adaptation project in Tuvalu that involved reclaiming land from borrow pits, which improved the island's resilience to rising sea levels and extreme weather and enhanced living conditions for the community.
9	Report/ paper	Wemaëre, M., Vallejo, L., & Colombier, M. (2023)	Financing Loss and Damage: Overview of tax/levy instruments under discussion	This paper provides an overview of various tax and levy instruments that could be employed to increase climate finance, focusing on those related to GHG emissions and fossil fuel activities, while also addressing key implementation considerations.
10	National statement	Natano, K. (2022)	National Statement: Prime Minister of Tuvalu Honourable Kausea Natano - UNFCCC/ COP27	In his address to the 27th COP, the Tuvaluan prime minister Kausea Natano expressed concerns about climate change's impact on his country and advocated for a Fossil Fuels non-proliferation treaty and the reduction of short-lived climate super pollutants to address the urgent climate crisis.
11	Paper/comment	Farbotko, C., Boas, I., Dahm, R., Kitara, T., Lusama, T., & Tanielu, T. (2023)	Reclaiming open climate adaptation futures	The paper discusses the problematic narrative of inevitable uninhabitability in the face of sea-level rise and highlights the need for more inclusive and self-defined narratives of climate adaptation futures to uphold the right to self-determination and challenge climate change colonialism.

12	Insight Paper	Mustapha, S. & Williams, E. (2023)	Adressing Loss and Damage: Inisghts on the fund and Global Shield	The paper discusses the establishment of the Loss and Damage Fund, focusing on its significance in addressing climate-related Loss and Damage, and how it aligns with the Global Shield initiative, thereby, highlighting key issues that both initiatives must address to effectively assist the most vulnerable populations impacted by climate change.
13	Research article	Fanning, A. L., & Hickel, J. (2023)	Compensation for atmospheric appropriation	The article presents a method to calculate that, in a scenario where all countries reach net-zero emissions by 2050, wealthier nations in the global North would overshoot their fair share of the 1.5°C carbon budget by three times, resulting in a $192 trillion compensation owed to countries in the global South, averaging $940 per capita per year.
14	Research paper	Richards, J., A., Schalatek, L., Achampong, L., & White, H. (2023)	The Loss and Damage Finance Landscape	The paper addresses the state of “polycrisis” in the world, emphasising the insufficiency of climate mitigation and adaptation efforts and discusses the establishment of a Loss and Damage Fund (LDF) at COP 27 as a positive development, examining key considerations for its operationalisation.
15	Blogpost	Ruwayda, M. (2023)	Climate and Colonialism	This blogpost highlights the climate crisis’s disproportionate impact on lower-income countries, exacerbated by colonial legacies, and the urgent need for addressing climate debt, structural inequalities, and power imbalances.
16	Blogpost	SPREP (2023)	PACRES Project Building Tuvalu’s Resilience To Adapt To Climate Change	The blogpost discusses the PACRES project, which aims to assist Tuvalu in battling the climate crisis by enhancing its climate change adaptation and resilience efforts through policy development and the maintenance of a climate change portal, with a positive impact already observed.
17	Blogpost	Savarala, S. (2023)	It’s time to address the devastating injustice of Loss and Damage	This blogpost discusses the significant and wide-ranging impacts of climate change, in regard to Loss and Damage, encompassing not only economic losses but also non-economic losses, thereby, focussing on the need for global collaboration and climate justice in addressing these issues.

18	Newspaper article	Fainu, K. (2023)	Facing extinction, Tuvalu considers the digital clone of a country	The article discusses how the Pacific nation of Tuvalu, facing extinction due to climate change, is considering creating a digital clone of the country to preserve its culture and history, alongside efforts to reclaim physical land as part of its survival strategy.
19	Presentation	UNFCCC (2023a)	Outcomes of the first workshop on addressing Loss and Damage in the context of decisions 2/CP.27 and 2/CMA.4	A summary of the outcomes of the first workshop of the Transitional Committee in addressing Loss and Damage and establishing a Loss and Damage Fund.
20	Presentation	UNFCCC (2023b)	Second workshop on addressing Loss and Damage in the context of decisions 2/CP.27 and 2/CMA.4 -	A summary of the outcomes of the second workshop of the Transitional Committee in addressing Loss and Damage and establishing a Loss and Damage Fund.

11.5. Appendix E: Coding Scheme

Theme	Code	Sub-Code	Meaning
Tuvalu			
	Climate change consequences		Climate change consequences that Tuvalu is experiencing
	Relocation		Tuvaluans having to relocate to a different country (due to the impacts of climate change)
	Sinking narrative		The portrayal of Tuvalu as the 'sinking island nation'
	Importance of Tuvalu		Importance of safeguarding Tuvalu
	Culture indigenous knowledge practices		Importance as well as examples of cultural/ indigenous knowledge/ practices in Tuvalu
	Sovereignty		Tuvaluans understanding of sovereignty + importance of maintaining their sovereignty
	Digital Tuvalu		Digital Tuvalu project
	Land reclamation		Land reclamation project
Loss and Damage	Understanding the concept of Loss and Damage in relation to climate change impacts		Understanding the concept of Loss and Damage in relation to climate change impacts
	Economic Loss and Damage		Climate-induced Loss and Damage affecting goods, resources and services
	Non-economic Loss and Damage		Climate-induced Loss and Damage affecting cultural/ indigenous knowledge/ practices and identity in Tuvalu
	Stakeholder for Loss and Damage		Potential stakeholders playing a role in advocating for Tuvalu's sovereignty over climate adaptation in the Loss and Damage Fund
		International stakeholder	International stakeholders (including for example,

			negotiators from developed countries or advocates from NGO's/ grassroot movements, civil- society organisations)
		Local stakeholder/ Tuvaluan government	Local stakeholders/ experts from Tuvalu or the Tuvaluan government
	Feasibility		Feasibility of implementing the Loss and Damage Fund and actually supporting affected communities
	A new insurance scheme		Fear of the Loss and Damage Fund only being an insurance scheme
	Green Climate Fund		Similarities between the Green Climate Fund and the Loss in Damage Fund (i.e., in their establishment/ implementation process, in negotiations, etc.)
Challenges and Barriers for Tuvalu			Obstacles faced by Pacific Island states (specifically Tuvalu) in addressing climate change
	Structural/ institutional barriers/ bureaucratic procedures		Limited capacity for bureaucratic procedures (i.e., complex and lengthy bureaucratic procedures/ negotiation processes
	Strings attached		Very specific conditions under which the affected countries will receive the funding; strings attached to the funding
	Lack of resources		Lack of/ limited resources for bureaucratic procedures
	Dependence on international cooperation/ support		Dependence on other organisations/ nations to provide support in regard to financing or the possibility to share their story in the international arena
		Underrepresentation of Pacific Island states	Disproportionate representation in international forums and negotiations/ Underrepresentation of Pacific Island states

	Isolation (geographical/ physical)		Geographical and physical isolation further complicating issues of access (i.e., to decision-making platforms/ negotiations)
Power Dynamics, (Climate) Colonialism, and Climate (In)Justice			The dynamics of power and influence among stakeholders in climate change decision-making processes, including historical and ongoing impacts of colonialism (particularly in the context of climate change) and the resulting climate injustice
	Climate Injustice		
		(Structural) inequalities and social marginalisation	Persistent (structural) inequalities and social marginalisation
		Unequal burden sharing	Global power imbalances and unequal burden sharing
		Unequal distribution of resources	Inequitable distribution of resources and benefits
	Colonialism		
		Colonial institutional frameworks	Institutional frameworks established during colonial rule
		Historical legacies, economic exploitation, and dependency	Historical practices of colonialism by developed countries, which lead to economic exploitation, and dependency on developed countries
		Responsibility	Responsibility of the developed countries to support developing countries due to historical emissions
		New forms of colonialism	New forms of colonialism and not (only) historical practices of colonialism
		No colonialism	No forms of colonialism
	Power dynamics		
		Agenda setting by developed countries	Influence of developed countries on policy and negotiations

		Limited access to decision-making and self-determination	Pacific Island states experiencing limited access to decision-making platforms/ negotiations
Negotiations			Insights from the UN climate change conference in Bonn (i.e., Transnational committee) and Macron's Summit for a New Global Financing Pact in Paris
	Bonn UNFCCC		Bonn Climate Change Conference by the UNFCCC which took place in June 2023 (also referred to as small COP)
		Slow progress	Slow progress by the Transitional Committee regarding the establishment of a Loss and Damage Fund
		No progress	No progress by the Transitional Committee regarding the establishment of a Loss and Damage Fund
		Progress	Progress by the Transitional Committee regarding the establishment of a Loss and Damage Fund
		No agreement on a host for the Santiago Network on Loss and Damage	No agreement on a host for the Santiago Network on Loss and Damage (i.e., who will host the fund)
		Push against Loss and Damage from developed countries (e.g., US)	Developed countries (e.g., specifically the US) push against the establishment of a Loss and Damage Fund
		Cohesion between developing countries and awareness raising by developing countries	Developing countries working collaboratively together towards the establishment of a fund; developing countries are raising awareness about the urgency of establishing such as fund
	Macron's Summit for a New Global Financing Pact in Paris		Macron's Summit for a New Global Financing Pact, which took place in Paris in June 2023

		Unsuccessful/ distraction by developed countries	Unsuccessful in discussing Loss and Damage/ distraction by developed countries to further delay the establishment of a fund
		Successful	Successful in discussing Loss and Damage
Conditions for just & equitable Loss and Damage Fund			Conditions which need to be met so that the Loss and Damage Fund effectively supports Tuvalu in maintaining its sovereignty and making informed decisions on climate change adaptation
	Tailored to the needs of the country	Indigenous/ traditional knowledge/ practice	Indigenous/ traditional knowledge/ Practice; Recognition of traditional knowledge & practices
	GCF conditions		Loss and Damage Fund conditions should be similar to the conditions of the Green Climate Fund
	Simplifying procedures/ less bureaucracy		Simplifying procedures for receiving the fund/ less bureaucracy to make it more accessible
	Inclusive approach (locals)		Inclusive representation of stakeholders (e.g., national & international stakeholder)
	Access to resources/ technical expertise		Access to technical expertise
	Financing		Adequate financial resources
	Capacity building		Capacity building within developing countries to reduce their reliance on developed countries
	Transparent decision-making		Transparent decision-making processes
International Support			Support from international organisations and grassroots movements to address climate change in Tuvalu
	Collective efforts		
	Debt release		

	Activism/ Youth involvement		
	Listening to locals/ indigenous experts		
	Awareness raising		

11.6. Appendix F: Results from the MaxQda Analysis

In the following, the results of the MaxQda analysis will be presented.

Figure 1. Word cloud of most frequent words from the interviews.

To get familiarised with the interviews and the most prominent words, a word cloud was established. Concretely, Fig. 1 illustrates which words have been mentioned most frequently in the interviews. Next to domain specific words, such as: ‘loss’, ‘damage’, ‘fund’, ‘Tuvalu’, ‘country’, ‘people’, ‘develop’; critical concepts such as: ‘indigenous’, ‘community’; but also ‘debt’ and ‘colonial’ have been mentioned frequently.

Based on the coding scheme, the interviews and the documents were analysed. For this, corresponding text items were highlighted and classified to the themes. In total, there were seven themes: ‘Tuvalu’, ‘Loss and Damage’, ‘Challenge & Barriers’, ‘Power dynamics/ Colonialism/ Climate (In) Justice’, ‘Negotiations’, ‘Conditions for Fund’, and ‘International support’. Each theme had multiple codes and sub-codes. A frequency analysis was conducted to identify the most frequent codes. As it was only possible to identify the most frequent code within one theme, the findings are categorised per theme.

Tuvalu

Code	Frequency
Climate change consequences	23% (37)
Relocation	8% (13)
Sinking narrative	6% (9)
Importance of Tuvalu	19% (31)
Culture + Indigenous practices	20% (32)
Sovereignty	7% (11)
Digital Tuvalu	7% (11)
Land reclamation	10% (16)

Figure 2. Frequency of the codes in the theme of ‘Tuvalu’

As can be seen in Fig.2, the most salient code in the theme of Tuvalu, was 'climate change consequences' and was mentioned 37 times across the interviews and documents. Further, the codes 'culture and indigenous practices' (frequency: 32) and the 'importance of Tuvalu' (frequency: 32) were applied frequently.

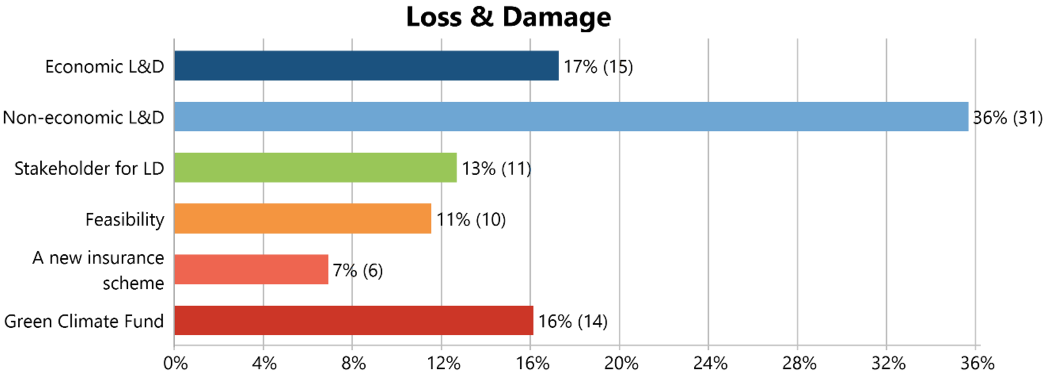

Figure 3. Frequency of the codes in the theme of 'Loss and Damage'

Non-economic Loss and Damage was discussed 31 times in the interview and documents, thereby, making it the most frequent code of the theme 'Loss and Damage' (see Fig. 3).

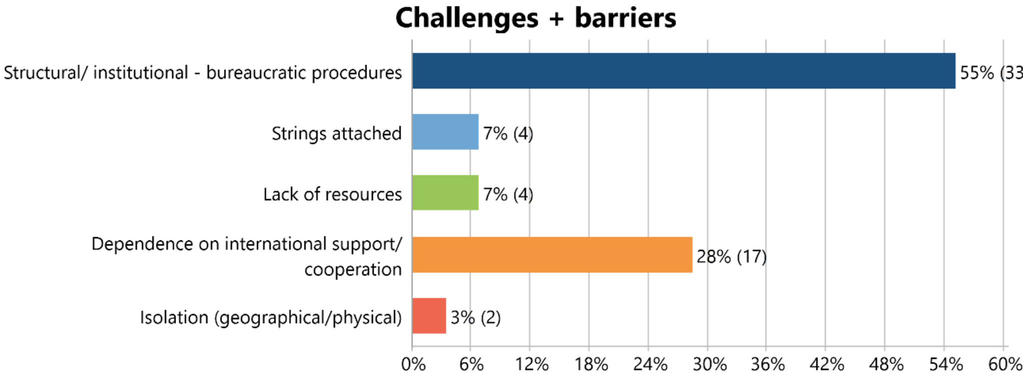

Figure 4. Frequency of the codes in the theme of 'Challenges and Barriers'

'Structural and institutional barriers – bureaucratic procedures' was the most salient code in the theme of 'challenges and barriers', with a frequency of 33 (see Fig. 4).

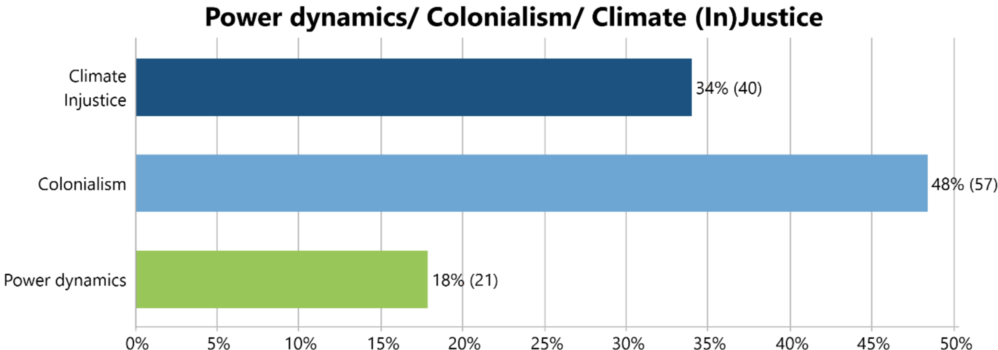

Figure 5. Frequency of the codes in the theme of 'Power dynamics/ Colonialism/ Climate (In) Justice'

Fig. 5 reveals that 'colonialism' was discussed 57 times, thereby, making it the most frequent code in the theme of 'Power dynamics/ Colonialism/ Climate (In) Justice'. This code also had many sub-codes, which the analysis could not include, but they were visible in MaxQda.

The theme 'Negotiations' only had two codes, namely 'Bonn climate change conference' and 'Macrons Summit', as these topics have only come up during some interviews and were not mentioned that frequently, no Figure is shown for this theme.

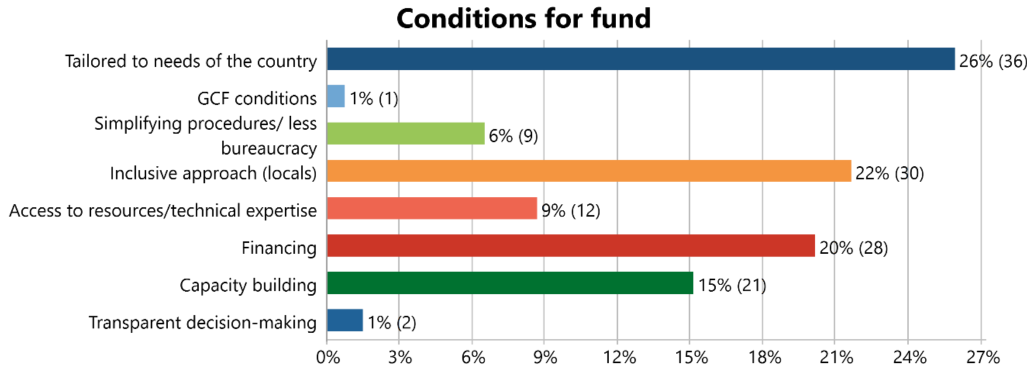

Figure 6. Frequency of the codes in the theme of 'Conditions for the Fund'

'Tailored to the needs of the country' was the most frequent code in the theme of 'Conditions for the Fund' (frequency: 36). Next to that, 'inclusive approach (locals)', as well as 'financing' was also frequently mentioned (see Fig. 6).

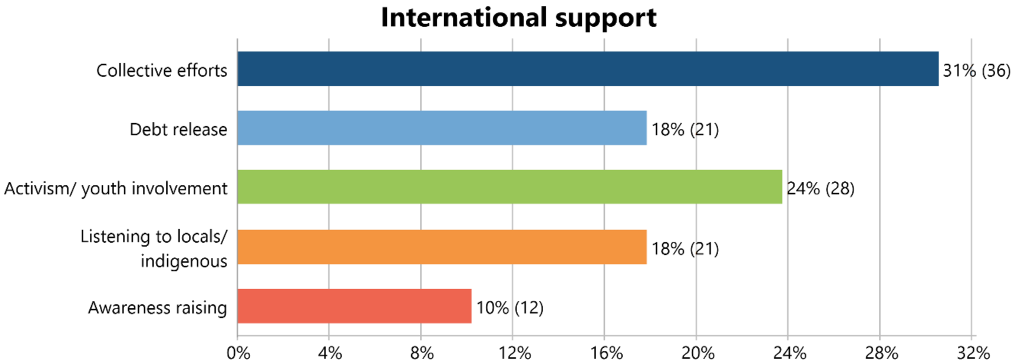

Figure 7. Frequency of the codes in the theme of 'International Support'

Lastly, Fig. 7 shows that 'collective efforts' was the most frequent code in the theme of 'International Support' (frequency: 36).