



Universiteit
Leiden
The Netherlands

How Protecting the Rights of Indigenous Peoples Can Promote Sustainable Land Resource Management: The Case of New Zealand
Ohtonen, Pinja

Citation

Ohtonen, P. (2024). *How Protecting the Rights of Indigenous Peoples Can Promote Sustainable Land Resource Management: The Case of New Zealand*.

Version: Not Applicable (or Unknown)

License: [License to inclusion and publication of a Bachelor or Master Thesis, 2023](#)

Downloaded from: <https://hdl.handle.net/1887/3764989>

Note: To cite this publication please use the final published version (if applicable).



**Universiteit
Leiden**
The Netherlands

Bachelor Thesis

**How Protecting the Rights of Indigenous Peoples Can Promote Sustainable
Land Resource Management: The Case of New Zealand**

Pinja Ohtonen

S3102009

Leiden University

BSc Political Science: International Relations and Organizations

Supervisor: Dr. Cynthia Embido Bejeno

Submission date: 23.5.2024

Referencing style: APA 7th Edition

Word Count: 7973

Publication Statement: Public

Abstract

Indigenous people possess valuable knowledge of land management due to their traditional nature-based lifestyle. Furthermore, land often has spiritual, political, and cultural value to indigenous people, incentivizing them to sustainably manage the land and its natural resources. It has therefore been argued that effective protection of the rights of indigenous peoples may advance sustainability outcomes. With a case study of New Zealand, this thesis examines the causal mechanisms through which the protection of the rights of indigenous peoples may enhance the promotion of sustainable land resource management. Consequently, this thesis aims to contribute to the ongoing debates on how to achieve environmentally sustainable development models, especially in industrialized countries.

Keywords: sustainability, indigenous people, human rights, sustainable development, New Zealand, traditional ecological knowledge, natural resource management

Acknowledgments

I want to express special thanks to all of my friends I met during my exchange in Dunedin, New Zealand, with whom I had the incredible opportunity to enjoy the nature and landscapes of this beautiful country. Getting to live in New Zealand greatly inspired me in the selection of this thesis topic. Furthermore, I want to extend my gratitude to my friends in the Hague for all the support and fun moments, and to my family for always believing in me.

Table of contents

Introduction.....	5
Theoretical discussion and framework.....	7
Rights of the indigenous people.....	7
Land resource management as part of sustainable development.....	8
Protection of the rights of indigenous people as promoting sustainable land resource management: Establishing the link.....	9
Causal mechanisms and theoretical expectations	11
Research design and methodology.....	13
Case selection.....	13
Method of analysis.....	15
Data selection.....	17
Findings and analysis.....	17
Utilization of indigenous knowledge in sustainable land resource management.....	18
Creation of an additional obligation for sustainable land resource management.....	22
Discussion.....	25
Conclusion and reflection.....	26
Bibliography.....	28
Appendix A. Summary and page numbers of process tracing sources.....	34

Introduction

Conventional development has been successful in achieving economic growth, yet substantially failed in environmental protection (Russel & Kirsop-Taylor, 2022, p. 2; Salim, 2007, p. 25). For several decades, there have been calls for sustainable development models that consider the well-being of future generations and adopt a broader conceptualization of development with the inclusion of environmental and social dimensions (Salim, 2007, p. 26). The calls for sustainable development have been institutionalized in the organizations of global governance, most prominently in terms of the United Nations (UN) Sustainable Development Goals (SDGs), which among other goals aim to protect the environment (UNDP, n.d.).

Consequently, a question of crucial relevance for today's policymakers on national and international stages is how to promote and implement practices of sustainable development, which arguably can be in contradiction with other endeavors, such as economic growth, which many Western countries prioritize (Mannakkara et al., 2023, p. 388). Furthermore, it can be argued that because of the prioritization of economic growth, particularly these industrialized countries suffer from unsustainable models of development regarding the protection of the natural environment and sustaining its resources (Heinämäki, 2009, p. 8). As a result, industrialized nations have increasingly begun seeking alternative sources of knowledge and expertise to arrive at more sustainable models of development, stepping out from the sole hegemony of Western scientific knowledge (p. 12).

It is in this context that Western countries have recognized the value of indigenous people's knowledge and expertise when it comes to the sustainable management of natural resources (Berkes et al., 2021; Heinämäki, 2009; Mannakkara et al., 2023; Tsosie, 2018). Specifically, indigenous people place a high value on their lands and thus have accumulated knowledge over generations on how to manage it sustainably (Burfitt & Heathcote, 2014, p. 386; Heinämäki, 2009, pp. 4-5; Persoon & Minter, 2020, p. 2). Moreover, their value systems toward the natural environment typically have the concept of sustainability in a central position (Burfitt & Heathcote, 2014, p. 386; Heinämäki, 2009, p. 10). Consequently, it has been proposed that protecting the rights of indigenous people promotes sustainable development (Heinämäki, 2009, p. 9). The

existing literature on the topic has shed light on the association between protection of indigenous people and sustainable development outcomes, yet empirical research systematically investigating the causal mechanisms at play is scarce. Furthermore, no prior research has specifically focused on sustainable land resource management as a component of sustainable development, despite the relevance of researching it considering the recognized special relationship of indigenous people with their lands. Therefore, this thesis investigates the following research question:

How does the protection of the rights of indigenous people promote sustainable land resource management?

Therefore, beyond providing valuable information to national and international policymakers on the possible roads to sustainable solutions, this thesis builds on and adds to the existing scientific knowledge. The research question will be examined with a case study of New Zealand: once a settler colony of Britain, New Zealand has sought to address the Māori grievances, including regarding their land rights (Orange, 2023). Furthermore, New Zealand has been recognized for its comprehensive sustainable resource management system (OECD, 2017). With an in-depth qualitative analysis, this thesis closely investigates and tests the expected causal mechanisms through which the protection of indigenous rights may enhance the promotion of sustainable land resource management as a part of SDGs.

The rest of the paper will proceed as follows: first, a theoretical discussion providing background on the rights of the indigenous people, sustainable land resource management, and their association will be provided. What follows is a conceptualization of the causal mechanisms which focuses on formulating theoretical expectations for carrying out the rest of the thesis. Subsequently, choices regarding the research design will be justified and elaborated on, followed by the analysis and discussion of the empirical data. Lastly, a conclusion and reflection of this thesis shall be presented.

Theoretical discussion and framework

The main objective of this thesis is to closely investigate the hypothesized causal mechanisms between the protection of the rights of the indigenous people and sustainable land resource management. Therefore, the theoretical framework shall begin with a discussion and conceptualization of the key terms: indigenous people and their rights, and sustainable land resource management. What follows is a discussion of theories establishing an association with the protection of the rights of indigenous people and sustainable land resource management, providing the theoretical base to examine the causal mechanisms behind the hypothesized association. Finally, based on the discussion of previous literature, the causal mechanisms are conceptualized and theoretical expectations for this thesis are elaborated on.

The rights of the indigenous people

The rights of the indigenous people have increasingly been on the international agenda, signaled for instance by the adoption of the United Nations Declaration on the Rights of the Indigenous Peoples (UNDRIP) in 2007 by the United Nations General Assembly (United Nations, n.d.-b). The United Nations Permanent Forum on Indigenous Peoples has emphasized certain criteria that help in defining indigenous peoples, which are reflected in the following conceptualization: “a self-identified member of an Indigenous community that exhibits historical continuity with pre-colonial/pre-settler societies, strong attachment to identified land and a commitment to preserving or reclaiming its cultural, social, economic or political systems” (Hanrahan, 2017, p. 73; United Nations, 2013, pp. 2-3). In a similar manner, the World Bank (2023) has defined indigenous peoples as “distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced”. Furthermore, Tsosie (2018, pp. 230-231) has emphasized the importance of defining the indigenous populations as “peoples” rather than “communities”, as the former implies the right to self-determination sought by many indigenous peoples. An observation of interest is the definitions’ collective emphasis on the strong relationship between indigenous people and their lands. Namely, the close relationship that indigenous people possess with their lands is strongly reflected in and an integral component of their human rights (Jegade, 2017, p. 25).

Consequently, the rights of the indigenous people, as defined in UNDRIP but also to varying extent in national legislations, derive from human rights standards and fundamental freedoms (United Nations, n.d.-b). Specifically, they aim to ensure the dignity, survival, and well-being of the indigenous people considering their specific situation (United Nations, n.d.-b). Referring to the colonial history and continuation of the traditional lifestyle that differs from that of the majority of the population, indigenous people have been reported to face high levels of marginalization and discrimination in modern societies, calling for the reinforcement of their human rights (Amnesty International, n.d.). Furthermore, indigenous peoples' autonomy over their lands and natural resources has been recognized as essential in the fulfillment of their rights to culture, spirituality, subsistence, self-determination, among others (Heinämäki, 2009, p. 3; Jegede, 2017, p. 25; Tsosie, 2018, pp. 230-231). Thus, calls for the reinforcement of the rights of indigenous people also underline the importance of protecting the identified lands of indigenous people as well as granting the indigenous people rights toward the use and management of their land (Jegede, 2017, p. 25; Tsosie, 2018, pp. 230-231). What is recognized is the special and multifaceted relationship many indigenous peoples possess towards their land, which shall be elaborated on in the latter sections of the literature review.

Land resource management as part of sustainable development

To fully grasp the concept of sustainable land resource management, the concept of sustainable development must first be discussed. Arguably, the most prominent definition of sustainable development is one established in the UN 1987 Brundtland Commission report, which conceptualizes it as “development that meets the needs of the present without compromising the ability of future generations to meet their needs” (Russel & Kirsop-Taylor, 2022, p. 4; Shilling, 2018, p. 5). Furthermore, in 2015, the UN established 17 Sustainable Development Goals (SDGs) emphasizing social, economic, and environmental dimensions of development for current and future generations (UNDP, n.d.). The goal number 15 “Life on land” essentially targets sustainable land resource management, calling for the sustainable use, protection, and restoration of ecosystems; sustainable management of forests; and the halting of biodiversity loss and land degradation (United Nations, n.d.-a). Specifically, the concept of resource management concerns all policies and planning of when and how resources are used, produced, and developed within a society (United Nations, 2021, p. 3). Furthermore, sustainability is implicitly closely related to the

concept of resource management through the realization that natural resources do not last forever and thus require conservation and management (Fabricius, 2018, p. 5; United Nations, 2021, p. viii).

Importantly, it has been argued that to achieve UN SDG goal 15, and thus sustainable land resource management, “a fundamental shift in humanity’s relationship with nature is essential” (United Nations, 2023, p. 42). Therefore, the following section will elaborate on the previous literature and theories regarding the relationship indigenous people possess with the natural environment, and the knowledge and practices on sustainable land resource management that result from this relationship.

Protection of the rights of indigenous people as promoting sustainable land resource management: Establishing the link

Indigenous people have a manifold relationship with nature and the lands they reside on. Firstly, many indigenous peoples’ livelihoods depend on land and its resources, and thus environmental degradation or other environmental issues can pose severe difficulties in achieving for instance food security (Greaves, 2018, p. 108; Jegede, 2017, p. 25). In addition, land has cultural, spiritual, and social value to indigenous peoples (Heinämäki, 2009, pp. 4-5, 7; Jegede, 2017, pp. 25-26). Indigenous people often approach the relationship between human beings and the natural world from a holistic perspective, where humans are strongly interconnected to the land and dependent on it for their survival (Heinämäki, 2009, p. 6). Consequently, rather than perceiving themselves as owners of land, which is typical in Western conceptualizations of ownership, indigenous people typically consider themselves as custodians of the land on behalf of future generations (Burfitt & Heathcote, 2014, p. 385). Importantly, this custodial conceptualization of ownership implicates obligations to sustain the land in a way that future generations can enjoy the intergenerational wealth emanating from it (p. 386). Therefore, the concept of sustainability is often at the core of indigenous land resource management knowledge and practices (Burfitt & Heathcote, 2014, p. 386; Heinämäki, 2009, p. 10).

The distinct relationship of the indigenous people with nature has not gone unnoticed in the existing literature, particularly regarding the experience and knowledge of the indigenous people

concerning sustainable environmental practices (Heinämäki, 2009, p. 12; Persoon & Minter, 2020, p. 2). Furthermore, at least partly responding to the UN calls for a shift in humanity's relationship with nature, industrialized nations have begun to shift away from the hegemony of Western scientific knowledge as the sole informant of sustainable practices (Heinämäki, 2009, p. 12). Contrasted to Western values that typically prioritize economic development over environmental sustainability, indigenous people have increasingly been recognized as useful informants on sustainable land resource management practices due to their traditional way of life and the high value they place on the natural environment (Berkes et al., 2021; Heinämäki, 2009; Mannakkara et al., 2023; Tsosie, 2018). In this context, the concept of Traditional Ecological Knowledge (TEK) of the indigenous is often discussed, which encompasses practices and knowledge on the environment obtained through generations of living in close contact with nature (Berkes et al., 2021, p. 4; Heinämäki, 2009, p. 9; Whyte, 2018, p. 62).

Moreover, indigenous TEK for sustainable land resource management can be particularly useful in the context of intensifying climate change and environmental degradation. To address these global issues, knowledge from various perspectives is required (Berkes et al., 2021, p. 4; Whyte, 2018, p. 61). However, although the benefits of including the perspectives of indigenous people in land resource management have been identified and recognized, the existing literature presents a reason why indigenous perspectives and knowledge are not always utilized in resource management. Firstly, indigenous knowledge may be dismissed as TEK is considered cultural and belief-based, thus deviating from the Western concept of scientific knowledge (Berkes et al., 2021, p. 5). Secondly, and more importantly for the context of this thesis, indigenous knowledge may be dismissed due to power differentials between government science and indigenous perspectives (Berkes et al., 2021, p. 5; Heinämäki, 2009, p. 16). The capacity of the indigenous people to meaningfully participate in sustainable development practices on their identified lands has been hindered due to economic, social, and historical factors reflecting these power differentials (Heinämäki, 2009, p. 16). Consequently, it has been argued that *when* allowed to participate, indigenous people can make a valuable contribution to the sustainability of the environment (Heinämäki, 2009). The capacities of the indigenous to participate may be enhanced with the

protection and recognition of indigenous rights, creating a link between the protection of indigenous people and sustainable land resource management (p. 3).

Additionally, as discussed earlier, protecting the rights of the indigenous people includes recognizing the variety of rights the indigenous have towards their identified lands (Heinämäki, 2009; Jegede, 2017; Tsosie, 2018). Thus, effectively protecting the rights of the indigenous people can in itself be a positive act toward the sustainability of land resource management, as they are granted rights to continue their traditional practices which may be more sustainable (Heinämäki, 2009, p. 23). Protecting the rights of the indigenous people can act as an additional obligation for the governments to environmentally protect the environment where the indigenous reside (p. 27). Merely the protection of indigenous rights can thus promote sustainable land resource management, even if it would not lead to increased participation of the indigenous in state-level land resource management. Therefore, the previous literature suggests that effective protection of indigenous rights, whether through increased participation of the indigenous in the policy process or the creation of an additional obligation for sustainable land resource management, may lead to enhanced promotion of sustainable land resource management.

Causal mechanisms and theoretical expectations

The discussion of existing literature established the hypothesized connection between the protection of the rights of indigenous people and the promotion of sustainable land resource management. Indigenous people and consequently protection of their rights can have a valuable role in promoting sustainable practices due to the indigenous peoples' TEK and the distinct relationship with the natural environment, particularly the high value they place on it (Berkes, et al., 2021; Burfitt & Heathcote, 2014; Heinämäki, 2009; Jegede, 2017; Tsosie, 2018; Whyte, 2018).

To investigate the research question “*How does the protection of the rights of indigenous people promote sustainable land resource management?*”, the precise mechanisms through which the causal relationship between the protection of the rights of indigenous people and the promotion of sustainable land resource management is expected to operate must be specified. Therefore, this section of the paper aims to conceptualize and elaborate on two mechanisms, identified based on

the discussion of previous literature, through which protecting the rights of the indigenous people is expected to promote sustainable land resource management. The expected mechanisms are summarized in *Figure 1*.

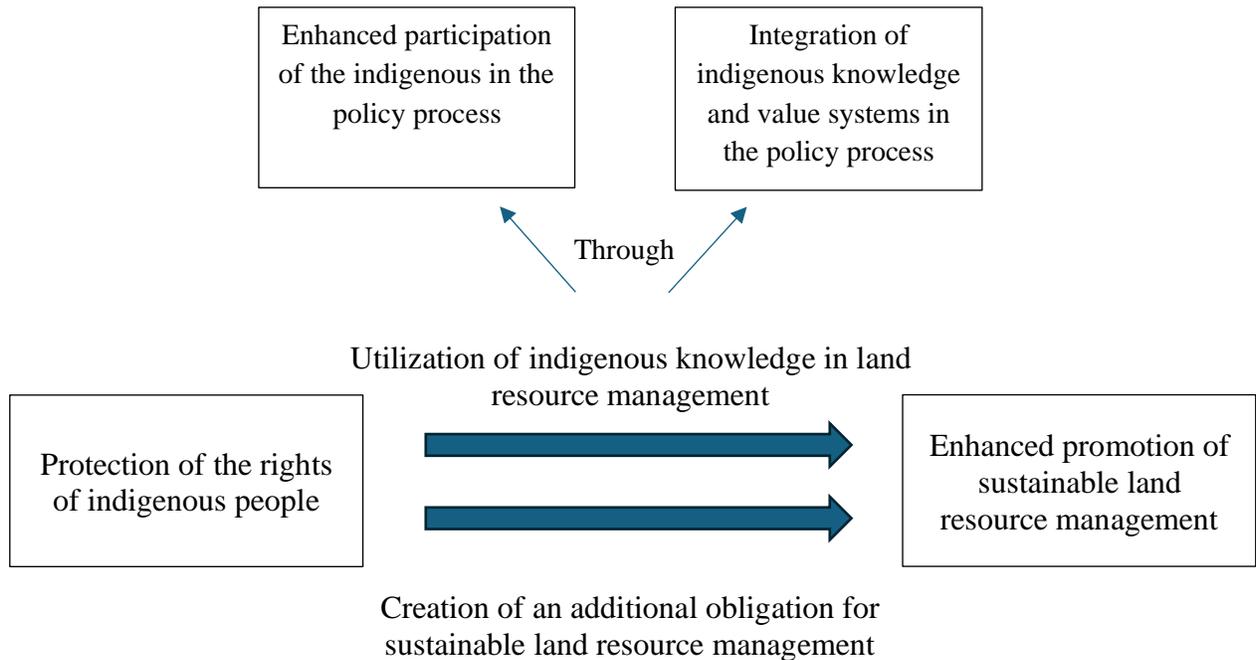


Figure 1. Expected causal mechanisms.

Firstly, the protection of the rights of indigenous people can lead to the utilization of indigenous knowledge in land resource management, which can provide valuable information on sustainable practices and increase knowledge on sustainable management (Berkes et al., 2021, p. 4). The effective protection of their rights can be a necessary step for governments to include indigenous knowledge in land resource management policies, through equalizing power differences in the politics of knowledge and leading to higher appreciation of the indigenous TEK and world view (Heinämäki, 2009). Through the protection of their rights, the indigenous people can be allowed to participate more in the planning and decision-making of land resource management, being able to voice their views and contribute to the sustainability of land resource management policies (p. 2). Furthermore, the protection of indigenous rights can also lead to the integration of their knowledge and value systems in the policies of land resource management (p. 13). This integration of indigenous knowledge systems can not only be technical knowledge of sustainable practices but

also reflect, for instance, indigenous conceptualizations and value systems of land and the natural environment, which have sustainability at their core.

Secondly, the protection of indigenous rights can provide an additional obligation to manage land resources in a sustainable way. The health of the environment can sometimes come secondary to Western economic interests (Mannakkara et al., 2023, p. 388). However, if a state adopts an international treaty or national legislation on the protection of indigenous rights, a legal and/or moral obligation is created for the state to fulfill the specified rights of the indigenous peoples (Heinämäki, 2009, p. 27; Jegede, 2017, p. 25). For instance, if a government commits to fulfilling the indigenous right to their traditional nature-based way of life, an additional obligation to promote environmental conservation is created (Heinämäki, 2009, p. 27). Therefore, to protect the rights of the indigenous, for instance, new conservation policies may be created to protect the indigenous people's traditional lands, contributing to the sustainability of land resource management.

Research design and methodology

The research will be carried out with the methodology of a qualitative single case study. Firstly, the single-case study design was chosen as it is commonly used for an in-depth investigation of the causal mechanisms, rendering it the most suitable design (Halperin & Heath, 2020, p. 167). Secondly, a qualitative design was chosen since observing the causal mechanisms of interest in this research requires an in-depth analysis of textual data such as policy documents (p. 13).

Case selection

This thesis aims to provide insights and contribute to the existing discussions on the protection of indigenous rights and sustainability. Thus, since the case study deals with a broader phenomenon, the most appropriate case selection method is the “typical case”, which is essentially a representative case of the causal relationship, increasing the generalizability of the findings of this thesis (Gerring, 2008, p. 649). In qualitative designs, a typical case is often selected on the basis that it conforms to the expectations of the causal relationship of interest (p. 649). New Zealand is

chosen as a typical case because it has both of the variables of interest present: protection of indigenous rights, and promotion of sustainable land resource management.

To begin with, New Zealand has an indigenous Māori population that is estimated to be 17.3% of the total population (New Zealand Government, 2023). In the past three or four decades, New Zealand has demonstrated consistent efforts to recognize and revive the rights and culture of Māori in New Zealand (Patman & Rudd, 2005, p. 7). In 1975, New Zealand established a tribunal called the Waitangi Tribunal to address the grievances of the indigenous people regarding the European settlement in the country (Wolfgramm et al., 2018, p. 214). In essence, the Tribunal and the broader treaty settlement process aim to give effect to the principles of the Treaty of Waitangi – the founding document of New Zealand signed between Māori and the British Crown – granting greater control of Māori over their affairs, including their lands (Orange, 2023). Furthermore, New Zealand is a signatory to the 2007 UNDRIP (United Nations, n.d.-b).

To continue with, for over three decades, the framework legislation for natural resource management in New Zealand was the 1991 Resource Management Act (RMA) (OECD, 2017, p. 15). The RMA was a significantly comprehensive act and aims to promote the sustainable management of natural resources (Ericksen et al., 2017, p. 1; OECD, 2017, p. 15). Although gaps and inefficiencies remain in the natural resource management regime in New Zealand, such as the lack of national guidance in some policy areas, the RMA has provided a comprehensive framework for national environmental policy development (OECD, 2017, pp. 16, 26). However, New Zealand is currently reforming its resource management system to address these inefficiencies and to better equip it for today's challenges such as climate change (New Zealand Ministry for the Environment, 2022c, p. 1). Furthermore, New Zealand has to date succeeded in some aspects of sustainable land resource management considerably better than many other Western countries: for instance, in 2017, 32% of New Zealand's territory had been classified as an environmentally protected area (OECD, 2017, p. 24). Therefore, the presence of both the protection of indigenous rights and the promotion of sustainable land resource management in New Zealand allows me to investigate the causal processes at play that may link these two phenomena in this thesis.

Method of analysis

This paper will use the method of process tracing for conducting the qualitative analysis. Process tracing is the most suitable method since it is designed to investigate causal processes (Beach, 2017, p. 1). Process tracing aims to link causes to outcomes and provide deep, contextual insight into the causal mechanisms investigated, which is why this method allows me to sufficiently investigate and ultimately answer the research question (pp. 1-2). Furthermore, the chosen variant of process tracing to be used is theory-testing process tracing as elaborated by Beach and Pedersen (2013). Theory-testing process tracing investigates whether the causal mechanism functions and exists as expected by the existing literature (p. 3). Therefore, the theory-testing process tracing will be used in this thesis to investigate whether the expected mechanisms elaborated in the theoretical framework conform to empirical evidence from the selected case of New Zealand.

In essence, process tracing thus aims to find empirical evidence to test the existence of the expected causal mechanism (Beach & Pedersen, 2013, p. 3). What is being traced in this research is thus evidence of the two identified causal mechanisms: utilization of indigenous knowledge in land resource management, and creation of an additional obligation for sustainable land resource management. It is important to mention that the two mechanisms are separate and not necessarily interdependent. Therefore, the presence or absence of one of these mechanisms does not preclude the presence of the other.

Furthermore, to investigate whether these mechanisms are present or absent in the case of New Zealand, the two mechanisms must be operationalized (Beach & Pedersen, 2023, p. 14). In the context of process tracing, this means translating the expected mechanisms into case-specific predictions of what empirical manifestations each mechanism should have, which also increases the reliability of the research (p. 14). The two expected causal mechanisms are operationalized into observable manifestations as shown in *Table 1*.

Causal mechanism	Subcategory of causal mechanism	Operationalization of the causal mechanism
Utilization of indigenous knowledge in land resource management	Enhanced participation of the indigenous in the policy process	<ul style="list-style-type: none"> • Did policy documents and publications refer to the inclusion or participation of the indigenous people in the policy process of land resource management?
	Integration of indigenous knowledge and value systems in the policy process	<ul style="list-style-type: none"> • Did policy documents and publications refer to the utilization of indigenous knowledge or value systems in the policy process of land resource management?
Creation of an additional obligation for sustainable land resource management	N.A.	<ul style="list-style-type: none"> • Did the protection of indigenous rights affect the content of land resource management policies in a way that promotes the sustainability of land resource management?

Table 1. Operationalization of causal mechanisms.

Data selection

The evidence analyzed consists of various policy statements and publications on or closely related to land resource management, collected from the website of the New Zealand Ministry for the Environment. Official government sources are reliable data and provide valuable insight into the planning and execution of policies of interest, allowing me to answer the research question. The sources are selected from the time frame of 2010-2023 mainly due to the availability of suitable data. Additionally, the selection ensures that the effective protection of Māori rights was already in place at this time point and thus, the causal mechanism is allowed to operate in this context.

Finally, theory-driven source selection will be used as it is appropriate for process tracing, where empirical evidence is selected based on its suitability to investigate whether theoretical expectations are in line with what is found empirically (Beach & Pedersen, 2013, pp. 99, 132). The sources analysed are listed and summarized in Appendix A. The selected data includes all National Policy Statements (NPS) relevant to the topic of land resource management. The framework for NPS was established in the 1991 RMA and they “provide national direction for matters of national significance relevant to sustainable management” (New Zealand Ministry for the Environment, n.d.). Furthermore, the analyzed data consists of publications on new or modified land resource management regulations, standards, or acts, including publications on the reformation of the resource management system that has been prevalent in the past years. Lastly, the data includes publications that specifically discuss or elaborate on the role of Māori in land resource management. Therefore, the selected data is suitable for finding observable evidence of the expected causal mechanisms as operationalized in *Table 1*.

Findings and analysis

This section analyses empirical evidence to investigate whether the empirical data aligns with the empirical observations illustrated in *Table 1*. Therefore, in essence, various documents will be analyzed in an attempt to trace the existence of the expected causal mechanisms and whether these mechanisms function in the way predicted, specifically to achieve more sustainable outcomes. The documents use various words and terminology from the Māori language. In these cases, the

English translation or explanation is provided in brackets the first time each Māori term is mentioned.

Utilization of indigenous knowledge in land resource management

As elaborated in the previous sections, indigenous knowledge of sustainable practices can be utilized in land resource management through i) enhanced participation of the indigenous in the policy process and ii) integration of indigenous knowledge and value systems in the policy process. Therefore, if this mechanism functions as expected in the case of New Zealand, observable evidence in accordance with *Table 1* should be present.

i) Increased participation of the indigenous in the policy process

The theoretical expectations argue that effective protection of indigenous rights should give a greater participatory role for the indigenous in the land resource management policy process. Following the expectations, special provisions enforcing the participation of Māori in different stages of the policy process were found in various documents and publications on land resource management. Furthermore, the analysis found that the resource management system established under the 1991 RMA has been sought to reform in recent years. In line with the expectations, the intended new resource management system aims to further enhance the participatory role of Māori.

Firstly, authorities and officials in resource management are tasked with responsibilities such as promoting collaboration with the Māori at the local level; involving Tangata Whenua (*people of the land; Māori of a particular locality in this context*) as partners in the management of resources, and consultation with Tangata Whenua in the creation of regional policy statements (New Zealand Department of Conservation, 2010, p. 11; New Zealand Ministry for the Environment, 2023b, p. 15; New Zealand Ministry for the Environment, 2023d, p. 2; New Zealand Ministry for the Environment, 2022a, p. 8). What becomes evident is that Māori participation is reinforced in various steps of the land resource management policy process, spanning from the planning of new policies and strategies to decision-making and implementation of land resource management regulations and principles. For instance, a publication concerning the development of a new National Planning Framework (NPF) for resource management states how “the Ministry for the Environment [...] is reaching out to [...] our Māori partners to help develop and shape the draft

[...] proposal before it is publicly notified”, highlighting the inclusion of Māori early on in the policy process (New Zealand Ministry for the Environment, 2023a, p. 5). Collaboration with Tangata Whenua is also required for example in monitoring activities for sustaining indigenous biodiversity (New Zealand Ministry for the Environment, 2023b, p. 30). The implementation plan for indigenous biodiversity management also recognizes that as kaitiaki (*guardians*), iwi (*Māori tribes*) and hapū (*Māori clans*) may take a strengthened role in resource management of indigenous biodiversity (p. 10).

Furthermore, New Zealand has been intending to improve and reform the natural resource management system established in 1991 since RMA can no longer provide the aspired deliverables for the environment or development (New Zealand Ministry for the Environment, 2022c, p. 1). Enhancing the participatory capacities and possibilities of Māori is consistently mentioned in publications regarding this reform. The new system aims to “give Māori a more strategic role in the system” introducing also a new national-level Māori body to monitor the resource management performance in relation to the fulfillment of Māori rights established in Tiriti (*Treaty of Waitangi*) (New Zealand Ministry for the Environment, 2022c, p. 2). The new resource management system also aims to fund and support Māori to allow for their enhanced participation in roles such as “governance, planning, and strategy development” of land resource management (New Zealand Ministry for the Environment, 2022c, p. 2). The system also emphasizes Māori participation at all levels of governance: national, regional, and local (p. 10).

The efforts to further increase the effective participation of Māori in land resource management accordingly reflect the advantages in the protection of the rights of the Māori throughout the 21st century. For instance, New Zealand signed UNDRIP only in 2010 (New Zealand Parliament, 2010). Furthermore, the Waitangi Tribunal established in 1975 is a permanent tribunal, and thus the settlement of Māori grievances has been an ongoing process over the past decades (Orange, 2023; Wolfgramm et al., 2018, p. 214). In this way, over the years more effective protection of Māori rights under the Treaty of Waitangi and international declarations such as UNDRIP can be linked with greater participatory potential and contribution of the Māori and increased recognition for the need of more effective participation of Māori in land resource management. The expected mechanism accordingly argues that the effective protection of indigenous rights increases their

participation in sustainable land resource management, thus matching the evidence with the expectations. If allowed to participate, the indigenous may meaningfully contribute to the sustainability of resource management practice (Heinämäki, 2009). Consequently, the following section will investigate whether the indigenous Māori knowledge and value systems have been integrated into policies in a manner that can advance the sustainability of land resource management.

ii) Integration of indigenous knowledge and value systems in the policy process

Observable evidence of this part of the mechanism is, as the operationalization shows, found if policy documents refer to the utilization of indigenous knowledge or value systems, which as elaborated earlier often have sustainable values in their core (Burfitt & Heathcote, 2014; Heinämäki, 2009). The analysis of policies and publications highlights how the importance of traditional Māori knowledge systems in promoting sustainable management of land resource management is explicitly stated. Additionally, the analysis reveals how Māori concepts and understandings of the natural environment and the importance of sustaining land have been used variously in land resource management policy processes. Particularly, in recent years the attempts to reform the resource management system have brought Māori conceptualizations of the natural environment to the core of the objectives of the new system.

Firstly, the importance of utilizing and integrating mātauranga Māori (*Māori knowledge*) is recognized in two of the analyzed National Policy Statements (NPS). In laying out the principles for the involvement of Tangata Whenua in the 2023 NPS for indigenous biodiversity, enabling the application of mātauranga Māori at all stages of the management of indigenous biodiversity is required (New Zealand Ministry for the Environment, 2023b, pp. 15-16). Local authorities are required, with the consent of Tangata Whenua, to enable the application of mātauranga Māori regarding indigenous biodiversity in the implementation of the NPS, thus, the TEK possessed by Māori should be utilized in the management of indigenous biodiversity (p. 16). Another NPS published over a decade ago, the 2010 NPS for coastal policy, exhibits similar provisions to those of the NPS for indigenous biodiversity. Particularly, in line with the NPS for indigenous biodiversity, the NPS for coastal policy states that mātauranga Māori should be incorporated in

regional policy statements and resource management plans (New Zealand Department of Conservation, 2010, p. 11).

In addition, the NPS for indigenous biodiversity emphasizes the collaboration between scientific knowledge and TEK. To illustrate, applications to obtain consent for activities that could cause “more than minor” adverse effects on biodiversity are not taken into account if the report is not prepared by “[...] an ecologist and, as required, any other person with suitable expertise, such as someone with expertise in mātauranga Māori” (New Zealand Ministry for the Environment, 2023b, p. 29). A similar policy concerning the involvement of mātauranga Māori in the consideration of applications for resource consent is also found in the NPS for coastal policy (New Zealand Department of Conservation, 2010, p. 11). Furthermore, the NPS for indigenous biodiversity states that when developing monitoring plans for indigenous biodiversity, ideally, scientific methods and mātauranga Māori would be used equally (New Zealand Ministry for the Environment, 2023b, p. 31).

Moreover, the findings highlight that not only the TEK of Māori is integrated into policies, but also their traditional values and worldview that promote the sustainable use of land. In 2010, a “Māori Values and World Views Supplement” was published, which aims to help decision-makers consider Māori values in resource management (Majurey et al., 2010, p. 257). Namely, this publication establishes that the understanding of Māori values and worldview is necessary to fully utilize mātauranga Māori, and it also acknowledges that these values often promote sustainability (p. 259). Indeed, Māori values and world views are actively integrated into policy statements on land resource management. Both NPS for indigenous biodiversity and coastal policy recognize Māori as *kaitiaki (custodian/guardian)* of their lands and environment, indicating a custodial type of ownership of land typical for indigenous communities and often focusing on intergenerational wealth (Burfitt & Heathcote, 2014, p. 385; New Zealand Department of Conservation, 2010, p. 5; New Zealand Ministry for the Environment, 2023b, p. 13; New Zealand Ministry for the Environment, 2023c, p. 10). Furthermore, the NPS for indigenous biodiversity states that Māori have the right to identify species and ecosystems as *taonga (treasure – anything of value)* and participate in the management of *taonga* (p. 27). The identified *taonga* then must be protected (p.

27). In essence, Māori are allowed to protect traditionally valuable areas and species, likely adding to the sustainability of the land and its resources.

Finally, the recent aims to reform the resource management system have even more prominently placed Māori values and concepts at the heart of the new frameworks and policies on land resource management. One of these new frameworks is the national planning framework (New Zealand Ministry for the Environment, 2023a, p. 8). Listing the purposes of creating this new framework, the first reason mentioned is to uphold Oranga o Te Taiao, which is also mentioned as essential in various other publications regarding the new resource management system (New Zealand Ministry for the Environment, 2022b, p. 1; New Zealand Ministry for the Environment, 2022c, p. 1; New Zealand Ministry for the Environment, 2022d, p. 1; New Zealand Ministry for the Environment, 2023a, p. 8). Oranga o Te Taiao has been defined as “an intergenerational ethic that speaks to the health and wellbeing of the natural environment, and the essential relationship between a healthy environment and its capacity to sustain all life”, and it is a concept drawn from the Māori (New Zealand Ministry for the Environment, 2022b, p. 1). Therefore, the intergenerational nature of maintaining land and its resources of the Māori, highlighting sustainable values and practices, has been enshrined at the heart of the new system.

The observable evidence demonstrates that in line with the expectations, both the TEK of Māori and their values and worldview toward the natural environment and their identified lands have been integrated into policies concerning land resource management. The expected mechanism indeed argues that effective protection of indigenous rights equalizes power differentials and leads to a higher appreciation of indigenous TEK and world view. Accordingly, the analyzed documents reveal that the usefulness of Māori TEK and values regarding the natural environment have been and are increasingly acknowledged in New Zealand, particularly in achieving sustainable solutions.

Creation of an additional obligation for sustainable land resource management

The second mechanism expected to explain the association between the protection of indigenous rights and sustainable land resource management is the creation of an additional obligation for sustainable resource management. If this mechanism is present in the case of New Zealand, the

empirical evidence should demonstrate that to protect the rights of Māori, such as rights to their land or customary practices, policy decisions promoting sustainable land resource management were made. Accordingly, the analysis of the evidence highlights how land resource management policies and practices should fulfill the principles laid out in the Treaty of Waitangi, a founding document of New Zealand that gives Māori control over their affairs, including their lands (Orange, 2023). Furthermore, although other instruments and treaties protecting the rights of indigenous people, such as UNDRIP, are not explicitly mentioned, commonly recognized indigenous rights such as the right to culture can be argued to have affected the policy decisions accordingly.

Firstly, under the 1991 RMA resource management planning documents are required to “take into account” the principles of the Treaty of Waitangi (New Zealand Ministry for the Environment, 2018, p. 18). The NPSs for indigenous biodiversity and coastal policy both also mention taking into account these principles, as they function according to the resource management framework established in the RMA (New Zealand Ministry for the Environment, 2023b, p. 6; New Zealand Department of Conservation, 2010, p. 9). The principles to be taken into account are not explicitly stated, although it is recognized that they evolve over time with the Waitangi Tribunal settlement process (New Zealand Ministry for the Environment, 2018, p. 18). However, the Treaty of Waitangi gives Māori exclusive rights over their lands, forests, and other properties (Orange, 2023). Consequently, these provisions in policies can give Māori greater control over the management of their lands, prospectively increasing the protective measures toward sustaining these lands.

Secondly, in reforming the resource management system, the wording “take into account” has been modified to “give effect” to the principles of Treaty of Waitangi, enhancing both the protection of the rights of Māori related to their lands as well as prospective for more sustainable practices on these lands (New Zealand Ministry for the Environment, 2023a, p. 8; New Zealand Ministry for the Environment, 2022b, p. 1; New Zealand Ministry for the Environment, 2022c, pp. 1-2; New Zealand Ministry for the Environment, 2022d, p. 1). Furthermore, the new resource management system is intended to be “a system that supports development within environmental limits and is required to give effect to the principles of Te Tiriti of Waitangi” (*Treaty of Waitangi*) (New

Zealand Ministry for the Environment, 2022c, p. 1). Therefore, considering environmental limits and protecting the rights of Māori under the Treaty of Waitangi are expressed as parallel aims of the new resource management system.

As this paper has established, indigenous peoples' control over their lands has been linked to their rights such as the right to self-determination, culture, and health (Jegede, 2017; Heinämäki, 2009). Although the analyzed policy documents and publications do not refer specifically to protecting the rights of indigenous people in relation to these aspects, it is implied. For instance, resource management under the 1991 RMA must “recognize and provide for the relationship of Māori and their culture and traditions with their ancestral lands”, implying an obligation to fulfill the cultural rights of the Māori related to land (New Zealand Ministry for the Environment, 2018, p. 12). Furthermore, the protection of the historic heritage of Māori from inappropriate use and development has been set as an obligation in the RMA, which can prevent unsustainable management of lands of historic importance for the indigenous (p. 12). The reformed resource management system also aims not only to protect but also enhance and restore the cultural heritage of Māori (New Zealand Ministry for the Environment, 2023a, p. 13). Finally, although not explicitly referring to Māori, the decision-making principles of the NPS for indigenous biodiversity recognizes that “the health and wellbeing of people and communities are dependent on the health and wellbeing of indigenous biodiversity and that in return people have a responsibility to care for and nurture it” (New Zealand Ministry for the Environment, 2023, p. 6). Thus, the right of communities to health, including the indigenous Māori, has created an additional obligation in this case for sustainable management of land resources in the form of protecting indigenous biodiversity.

To conclude, the empirical evidence supports the expectation that effective protection of indigenous rights creates an additional obligation for sustainable management of land resources. Specifically, recognizing the rights of Māori under the Treaty of Waitangi and recognizing the cultural and historic heritage concerned with their lands has led to provisions in policies that aim to protect these lands, likely contributing to the sustainable management of the lands concerned. Furthermore, as in the case of the utilization of indigenous knowledge in land resource management, the reforms to the resource management system are accompanied by stronger

protection of Māori rights under the Treaty of Waitangi, reflecting the link between effective protection of indigenous rights and sustainable land resource management throughout the treaty settlement process.

Discussion

Overall, the process tracing illustrated how the protection of the indigenous Māori rights in New Zealand can be linked to the promotion of sustainable land resource management in line with the expected causal mechanisms. The begin with, the analysis revealed that in New Zealand, the participatory role of Māori in managing land has been enforced in various policy documents concerning resource management activities. To continue with, the value of the knowledge that Māori possess regarding the land has been acknowledged and is increasingly used in parallel with scientific knowledge to inform land resource management planning and practices, implying an understanding of how it can contribute to sustainable solutions. Māori traditional values and world views that emphasized a holistic, sustainable, and custodial approach to land and the environment were also prominently included in the analyzed policies and publications, which might help New Zealand as a country shift its relationship with nature as more favorable to sustainable development. Finally, the ongoing settlement process of Māori rights under the Treaty of Waitangi was observed to influence land resource management policies in a way that promotes sustainable management. Other indigenous rights, such as the right to culture and health, were also spurring the creation of additional protective measures for the land and environment.

Although New Zealand has been on the road to enhancing the protection of the rights of Māori already for several decades, the analysis highlighted the ongoing nature of the treaty settlement process. The 1991 RMA and policies under its framework already substantively recognized the beneficial role Māori can play in the sustainability of land resource management, in line with the expected causal mechanism since the protection of the Māori rights was already in place at this point of time. However, the empirical evidence consistently demonstrated that the reform of the resource management system in the past years seeks to increase the role and prominence of Māori in land resource management even further. As New Zealand has arguably enhanced the protection of the rights of its indigenous people during the 21st century through the ongoing treaty settlement process and the adoption of UNDRIP, the analysis demonstrated how the increased protection of

Māori rights was reflected in the new resource management system. Therefore, the analysis in this thesis found support for the two expected mechanisms through which protection of the rights of indigenous people can promote sustainable land resource management in the case of New Zealand.

Conclusion and reflection

This thesis investigated how the protection of the rights of indigenous people can promote sustainable land resource management through an in-depth case study of New Zealand. Specifically, it identified and conceptualized two causal mechanisms through which protection of the rights of indigenous people can enhance the promotion of sustainable land resource management: through the utilization of indigenous knowledge of land resource management and the creation of an additional obligation for sustainable land resource management. The process tracing analysis found supporting evidence for the presence of both mechanisms in the case of New Zealand, in which the protection of indigenous Māori rights was concluded to have contributed to the sustainability of land resource management policies. Therefore, the protection of indigenous rights enhanced the promotion of sustainable land resource management through the utilization of indigenous knowledge of land resource management and the creation of an additional obligation for sustainable land resource management. Consequently, the findings complement and add to the arguments and theories in the existing literature on the association between protecting indigenous rights and achieving sustainable development outcomes (Berkes et al., 2021; Burfitt & Heathcote, 2014; Heinämäki, 2009; Tsosie, 2018).

Furthermore, this thesis provided to my knowledge the first empirical study focusing specifically on land resource management as a part of the broader sustainable development agenda in the context of studying the relationship between the protection of the rights of indigenous peoples and the promotion of sustainable development. Specifically investigating land resource management as part of sustainable development was a relevant addition to the scientific knowledge on the topic considering the special relationship indigenous people tend to have with their lands and thus, the incentives they have in maintaining it sustainably (Burfitt & Heathcote, 2014; Heinämäki, 2009). Additionally, this thesis contributed to the existing theoretical arguments in the form of explicitly presenting a causal model illustrating the relationship between the protection of the rights of

indigenous people and sustainable land resource management, which may also be utilized in further research.

The findings of this paper highlight the entanglement of the protection of the rights of the indigenous people and the sustainability objectives emphasized in international organizations, national governments, and corporations. In essence, this thesis emphasizes how the protection of the rights of indigenous people can serve as a favor to environmental development building on and adding to the existing literature (Heinämäki, 2009). The in-depth case study of New Zealand also provides information to other states with indigenous populations on how the indigenous people can be valuable informants and participants on sustainability issues if their rights are effectively valued and enforced.

However, there are limitations to this thesis which shall be addressed. Firstly, although the utilization of the typical case selection increases the wider applicability of the findings of this research through the selection of a representative case, the single-case study design is always limited in its generalizability (Gerring, 2008, p. 648; Halperin & Heath, 2020, p. 237). A similar analysis of other suitable cases, as suggested below, would help to increase the external validity of the findings of this thesis. Secondly, although the sources analyzed for process tracing were highly useful for the purpose of the research, perspectives from Māori people would have added to the argumentation of this thesis. Conducting interviews with Māori could have revealed more about how an increased protection of their rights has affected their role and rights regarding the management of their lands.

Finally, the findings of this thesis welcome further research investigating the causal mechanisms between the protection of indigenous rights and the promotion of sustainable land resource management or other dimensions of sustainable development. Countries operating in relatively similar contexts with their indigenous populations, such as Australia, Finland, or Canada could be studied to engage in further investigation and generalization of the causal mechanisms at play. Lastly, further research could engage in refining and specifying the causal model presented in this thesis through systematic research studies with varying methodological approaches suitable for theory-building activities.

Bibliography

- Amnesty International. (n.d.). *Indigenous peoples' rights*. <https://www.amnesty.org/en/what-we-do/indigenous-peoples/>
- Beach, D. (2017). Process-Tracing methods in social science. In *Oxford Research Encyclopedia of Politics*. Oxford University Press.
<https://doi.org/10.1093/acrefore/9780190228637.013.176>
- Beach, D., & Pedersen, R. (2013). *Process-tracing methods: Foundations and guidelines*. The University of Michigan Press.
- Berkes, F., Tsai, H.-M., Bayrak, M. M., & Lin, Y.-R. (2021). Indigenous resilience to disasters in Taiwan and beyond. *Sustainability*, 13(5), 1–17. <https://doi.org/10.3390/su13052435>
- Burfitt, B., & Heathcote, M. (2014). Valuing footsteps--towards a valuation model of indigenous knowledge and cultural expression for the sustainability of indigenous people's culture. *Journal of Intellectual Property Law & Practice*, 9(5), 383–388.
<https://doi.org/10.1093/jiplp/jpu043>
- Ericksen, N., Berke, P., Crawford, J., & Dixon, J. (2017). *Plan-making for sustainability: The New Zealand experience*. Routledge.
- Fabricius, C. (2018). The fundamentals of community- based natural resource management. In M. K. Nelson & D. Shilling (Eds.), *Traditional ecological knowledge: Learning from indigenous practices for environmental sustainability* (pp. 3–14). Cambridge University Press. <https://doi.org/10.1017/9781108552998.014>
- Gerring, J. (2008). Case selection for case-study analysis: Qualitative and quantitative techniques. In J. M. Box-Steffensmeier, H. E. Brady, & D. Collier (Eds.), *The Oxford handbook of political methodology*. Oxford University Press.
- Greaves, W. (2018). Damaging environments. *Environment and Society*, 9(1), 107–124.
<https://doi.org/10.3167/ares.2018.090108>

- Halperin, S., & Heath, O. (2020). *Political Research: Methods and Practical Skills*. Oxford University Press.
- Hanrahan, M. (2017). Water (in)security in Canada: national identity and the exclusion of indigenous peoples. *British Journal of Canadian Studies*, 30(1), 69–89.
<https://doi.org/10.3828/bjcs.2017.4>
- Heinämäki, L. (2009). Protecting the rights of indigenous peoples – Promoting the sustainability of the global environment? *International Community Law Review*, 11(1), 3–68.
<https://doi.org/10.1163/187197309x401406>
- Jegede, A. O. (2017). The protection of indigenous peoples' lands by domestic legislation on climate change response measures: exploring potentials in the regional human rights system of Africa. *International Journal on Minority and Group Rights*, 24(1), 24–56.
<https://doi.org/10.1163/15718115-02401003>
- Kushnir, I. (2022). Unpacking key terms: Sustainable development, indigenous knowledges, methodology. In M. F. Mbah, W. L. Filho, & S. Ajaps (Eds.), *Indigenous Methodologies, research and practices for sustainable development* (pp. 3–19). Springer Nature.
- Majurey, P. F., Atkins, H., Morrison, V., & Hovell, T. (2010). Maori values supplement: A supplement for the making good decisions workbook. *New Zealand Ministry for the Environment*. <https://environment.govt.nz/assets/Publications/Files/maori-values-supplement.PDF>
- Mannakkara, S., Elkhidir, E., & Matiu, A. (2023). The journey towards understanding and valuing indigenous knowledge for climate change adaptation in Northland, Aotearoa-New Zealand. In G. K. Panda, U. Chatterjee, N. Bandyopadhyay, & M. D. Setiawati (Eds.), *Indigenous knowledge and disaster risk reduction: Insight towards perception, response, adaptation and sustainability* (pp. 387–416). Springer.
- New Zealand Department of Conservation. (2010). *New Zealand coastal policy statement*.
<https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf>

New Zealand Government. (2023, November 16). *Māori population estimates: At 30 June 2023*.

<https://www.stats.govt.nz/information-releases/maori-population-estimates-at-30-june-2023/>

New Zealand Ministry for the Environment. (n.d.). *National policy statements*.

<https://environment.govt.nz/acts-and-regulations/national-policy-statements/>

New Zealand Ministry for the Environment. (2018, March 1). *National planning standards:*

Tangata Whenua provisions in resource management plans.

<https://environment.govt.nz/assets/Publications/Files/tangata-whenua-provisons-in-rm-plans.pdf>

New Zealand Ministry for the Environment. (2022a, September 22). *National policy statement for highly productive land 2022*.

<https://environment.govt.nz/assets/publications/National-policy-statement-highly-productive-land-sept-22-dated.pdf>

New Zealand Ministry for the Environment. (2022b, November 15). *Resource management reform: Roles and decision-making in the future system*.

<https://environment.govt.nz/publications/resource-management-reform-roles-and-decision-making-in-the-future-system/>

New Zealand Ministry for the Environment. (2022c, November 15). *Resource management reform: A more effective role for Māori*.

<https://environment.govt.nz/assets/publications/rm-reform-a-more-effective-role-for-maori.pdf>

New Zealand Ministry for the Environment. (2022d, November 15). *Resource management reform: Protecting the environment*. <https://environment.govt.nz/publications/resource-management-reform-protecting-the-environment/>

New Zealand Ministry for the Environment. (2023a). *Aotearoa New Zealand's new resource management system: Summary of developing the transitional National Planning*

- Framework*. <https://environment.govt.nz/assets/publications/RM-system-2023/NPF-Overview-Summary.pdf>
- New Zealand Ministry for the Environment. (2023b, July 7). *National policy statement for indigenous biodiversity*.
<https://environment.govt.nz/assets/publications/biodiversity/National-Policy-Statement-for-Indigenous-Biodiversity.pdf>
- New Zealand Ministry for the Environment. (2023c, July 7). *National policy statement for indigenous biodiversity: Implementation plan*.
<https://environment.govt.nz/assets/publications/biodiversity/NPSIB-Implementation-plan.pdf>
- New Zealand Ministry for the Environment. (2023d, October 3). *Decision-making, procedural and information principles in the natural and built environment act 2023*.
<https://environment.govt.nz/assets/publications/INFO-1192-Decision-making-NBA.pdf>
- New Zealand Parliament. (2010, April 20). *Ministerial statements — UN declaration on the rights of indigenous peoples—Government support - New Zealand parliament*.
https://www.parliament.nz/en/pb/hansard-debates/rhr/document/49HansD_20100420_00000071/ministerial-statements-un-declaration-on-the-rights-of
- OECD. (2017). *OECD Environmental Performance Reviews: New Zealand 2017*.
In <https://www.oecd-ilibrary.org/docserver/9789264268203-en.pdf?expires=1713293780&id=id&accname=oid048188&checksum=E663E51E19AC77A4A4D0D9335061F3FF>. OECD Publishing.
- Orange, C. (2023, March 28). *Te Tiriti o Waitangi – the Treaty of Waitangi*. The Encyclopedia of New Zealand. <https://teara.govt.nz/en/te-tiriti-o-waitangi-the-treaty-of-waitangi/print>
- Patman, R. G., & Rudd, C. (2005). New Zealand sovereignty in the era of globalization. In R. G. Patman & C. Rudd (Eds.), *New Zealand sovereignty in the era of globalization* (pp. 1–19). Routledge.

- Persoon, G. A., & Minter, T. (2020). Knowledge and practices of indigenous peoples in the context of resource management in relation to climate change in Southeast Asia. *Sustainability*, 12(19), 1–23. <https://doi.org/10.3390/su12197983>
- Russel, D., & Kirsop-Taylor, N. (2022). Introduction to the handbook on the governance of sustainable development. In D. Russel & N. Kirsop-Taylor (Eds.), *Handbook on the governance of sustainable development*. Edward Elgar Publishing .
- Salim, E. (2007). The paradigm of sustainable development. In *Institutionalising sustainable development* (pp. 25–29). OECD Publishing. <https://doi.org/10.1787/9789264019096-en>
- Shilling, D. (2018). Introduction: The soul of sustainability. In M. K. Nelson & D. Shilling (Eds.), *Traditional ecological knowledge: Learning from indigenous practices for environmental sustainability* (pp. 3–14). Cambridge University Press. <https://doi.org/10.1017/9781108552998.014>
- Tsosie, R. (2018). Indigenous peoples and “cultural sustainability”: The role of law and traditional knowledge. In M. K. Nelson & D. Shilling (Eds.), *Traditional ecological knowledge: Learning from indigenous practices for environmental sustainability* (pp. 229–249). Cambridge University Press. <https://doi.org/10.1017/9781108552998.014>
- UNDP. (n.d.). *What are the sustainable development goals?* <https://www.undp.org/sustainable-development-goals>
- United Nations. (n.d.-a). *Goal 15*. <https://sdgs.un.org/goals/goal15>
- United Nations. (n.d.-b). *United Nations declaration on the rights of indigenous peoples*. <https://www.un.org/development/desa/indigenouspeoples/declaration-on-%20the-rights-of-indigenous-peoples.html>
- United Nations. (2013). Indigenous peoples and the United Nations human rights system. In <https://www.ohchr.org/sites/default/files/Documents/Publications/fs9Rev.2.pdf> (pp. 1–44).

- United Nations. (2023). *The sustainable development goals report special edition 2023*. United.
<https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf>
- Whyte, K. (2018). What do indigenous knowledges do for indigenous peoples? In M. K. Nelson & D. Shilling (Eds.), *Traditional ecological knowledge: Learning from indigenous practices for environmental sustainability* (pp. 57–81). Cambridge University Press.
<https://doi.org/10.1017/9781108552998.014>
- Wolfgramm, R., Spiller, C., Houkamau, C., & Henare, M. (2018). Home: Resistance, resilience, and innovation in Māori economies of well-being. In M. K. Nelson & D. Shilling (Eds.), *Traditional ecological knowledge: Learning from indigenous practices for environmental sustainability* (pp. 213–228). Cambridge University Press.
<https://doi.org/10.1017/9781108552998.014>
- World Bank. (2023, April 6). *Indigenous peoples*.
<https://www.worldbank.org/en/topic/indigenouspeoples>

Appendix A. Summary and page numbers of process tracing sources

Document full citation and summary	Number of pages
<p>Full citation:</p> <p>Majurey, P. F., Atkins, H., Morrison, V., & Hovell, T. (2010). Maori values supplement: A supplement for the making good decisions workbook. <i>New Zealand Ministry for the Environment</i>. https://environment.govt.nz/assets/Publications/Files/maori-values-supplement.PDF</p> <p>Summary of document:</p> <p>The document is made to help decision-makers to take Māori values into account when implementing the 1991 Research Management Act.</p>	100
<p>Full citation:</p> <p>New Zealand Department of Conservation. (2010). <i>New Zealand coastal policy statement</i>. https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf</p> <p>Summary of document:</p> <p>National Policy Statement to create policies on the management of coastal environment (including land and its resources on coasts) to promote sustainability of natural resources.</p>	28

<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2018, March 1). <i>National planning standards: Tangata Whenua provisions in resource management plans.</i></p> <p>https://environment.govt.nz/assets/Publications/Files/tangata-whenua-provisions-in-rm-plans.pdf</p> <p>Summary of document:</p> <p>Report on Māori special provisions and their variation across regional and district resource management planning documents.</p>	<p>32</p>
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2022a, September 22). <i>National policy statement for highly productive land 2022.</i></p> <p>https://environment.govt.nz/assets/publications/National-policy-statement-highly-productive-land-sept-22-dated.pdf</p> <p>Summary of document:</p> <p>National Policy Statement to create policies on the on highly productive land as part of the land resource management system.</p>	<p>16</p>
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2022b, November 15). <i>Resource management reform: Roles and decision-making in the future system.</i> https://environment.govt.nz/publications/resource-management-reform-roles-and-decision-making-in-the-future-system/</p> <p>Summary of document:</p>	<p>4</p>

<p>Publication that elaborates on roles and decision-making systems in the new resource management system.</p>	
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2022c, November 15). <i>Resource management reform: A more effective role for Māori</i>. https://environment.govt.nz/assets/publications/rm-reform-a-more-effective-role-for-maori.pdf</p> <p>Summary of document:</p> <p>Publication that elaborates on how the new resource management system aims to establish a more effective role for Māori.</p>	<p>4</p>
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2022d, November 15). <i>Resource management reform: Protecting the environment</i>. https://environment.govt.nz/publications/resource-management-reform-protecting-the-environment/</p> <p>Summary of document:</p> <p>Publication that elaborates on the acts that will replace the 1991 Resource Management Act.</p>	<p>4</p>
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2023a). <i>Aotearoa New Zealand's new resource management system: Summary of developing the transitional National Planning Framework</i>.</p>	<p>19</p>

<p>https://environment.govt.nz/assets/publications/RM-system-2023/NPF-Overview-Summary.pdf</p> <p>Summary of document:</p> <p>Publication that elaborates on the planning and structure of the new resource management system.</p>	
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2023b, July 7). <i>National policy statement for indigenous biodiversity</i>. https://environment.govt.nz/assets/publications/biodiversity/National-Policy-Statement-for-Indigenous-Biodiversity.pdf</p> <p>Summary of document:</p> <p>National Policy Statement to create policies on sustaining and managing indigenous biodiversity.</p>	48
<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2023c, July 7). <i>National policy statement for indigenous biodiversity: Implementation plan</i>. https://environment.govt.nz/assets/publications/biodiversity/NPSIB-Implementation-plan.pdf</p> <p>Summary of document:</p> <p>Document that sets out plan for the implementation of the National Policy Statement for indigenous biodiversity.</p>	21

<p>Full citation:</p> <p>New Zealand Ministry for the Environment. (2023d, October 3). <i>Decision-making, procedural and information principles in the natural and built environment act 2023</i>. https://environment.govt.nz/assets/publications/INFO-1192-Decision-making-NBA.pdf</p> <p>Summary of document:</p> <p>Publication that elaborates on the decision-making, procedural, and information principles in the natural and built environment act 2023, which is one of the acts in the new resource management system.</p>	4
--	---