“Women Get Things Done”: An Examination of Tongan Women’s Participation in Disaster Risk Reduction

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Cover photo taken by author in December 2018, Ha'apai, Tonga.

Abstract

The policies and practices of Disaster Risk Reduction (DRR) are commonly utilised to mitigate and reduce the impact of natural hazards on a vulnerable population or individual. However, recent scholarship has concluded that mainstream DRR practices and policies tend to have little recognition or mention of women's issues, experiences or needs. For many reasons, including inequitable laws, poverty, restriction on freedom and socially constructed gender roles, women are one of the most vulnerable groups in society and are therefore one of the most vulnerable groups in disasters. Despite the recognition that vulnerability is gendered, women are rarely included in policy making or DRR projects. Consequently, the root causes of gendered vulnerability are not addressed, and actions and initiatives for DRR are ineffective. In the last 20 years, there has been more discussion around this issue and many international frameworks for DRR now recommend that women are explicitly included in policy making and project planning.

This thesis seeks to evaluate how policies inform practice in DRR, using a case study of Tonga. Specifically, it reviews the state of gender-inclusive policies and plans in Tonga, and assesses how they have been implemented in practice. The research is primarily based on a series of interviews which were held over two months in Tonga in late 2017, with a further analysis of the relevant policies. The research shows that women in Tonga are extremely active in community level DRR, but are not well represented in national DRR policies. Furthermore, though Tongan women are often constrained by the cultural norms and laws which can be restrictive, they are able to excel at managing and participating in community level initiatives.

This thesis proves that despite little to no recognition of their presence in national DRR policies, and the many cultural factors which restrict their opportunities, Tongan women have become key stakeholders the community, and their contributions are valued and respected. It suggests that the commonly held view that national level policies are the primary mechanism for initiating gender inclusive practices at the local level is overstated. In Tonga, changes are more effective when made at the local level, with the support of non-governmental organisations. The study thus has implications for how practitioners and policy makers assess the status of women and design their DRR projects accordingly.

Keywords: Disaster Risk Reduction, women, gendered vulnerability, Tonga, participation

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To my father – you have given me this opportunity. I am eternally grateful.

Table of Contents

List of Figures

List of Tables

List of Boxes

List of Acronyms

CCA	Climate Change Adaptation
CEDAW	Convention for the Elimination of Discrimination Against Women
COP	Conference of the Parties
COP21	2015 Conference of the Parties
DRR	Disaster Risk Reduction
FRDP	Framework for Resilient Development in the Pacific 2017 – 2030
JICA	Japan International Cooperation Agency
JNAP	Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management 2010 – 2015
LDS	Church of Jesus Christ of Latter-day Saints
MEIDECC	Ministry of Meteorology, Energy, Information, Disaster Management, Climate Change and Communications
MORDI	Mainstreaming of Rural Development Innovation, Tonga Trust
NGOs	Non-Governmental Organisations
PRRP	Pacific Risk Resilience Programme
RNPGAD	Revised National Policy on Gender and Development 2014
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction 2015 – 2030
SOPAC	Secretariat of the Pacific Community Geoscience Division
SPC	Pacific Community
SPREP	Secretariat of the Pacific Regional Environmental Programme
TC	Tropical Cyclone
TCDT	Tonga Community Development Trust
TNCC	Tongan National Council of Churches
TSDF	Tonga Strategic Development Framework 2015 – 2024
UN	United Nations
UNISDR	United Nations Office for Disaster Risk Reduction
VEMC	Village Emergency Management Committee
WAA21	Women's Action Agenda 21

Glossary of Tongan words

(Tongan to English)

Amatakiloa	A project run by the Tonga Community Development Trust which means 'Torch for Women'
'Eiki	A person with a high social ranking
'Eiki-tu'a	A traditional hierarchical relationship where one person is ranked higher than the other
Fahu	A system through which high cultural value is given to women over men, in particular the eldest sister of a family
Kainga	All relatives who have consanguineous relation
"Oku ke pilinisesi pe 'i ho 'api"	"You're a princess in your home"
Pālangi	Tongan word for a white person, generally used for foreigners
Tapu	Something that is special, sacred and should be protected
Tokateu	A project run by Tongan National Council of Churches, which means 'Tonga Community Disaster Risk Management Project'
Tu'a	A person with a lower social ranking
Tu'i Tonga fefine	Female chief in ancient Tonga

Chapter 1: An Introduction to the Thesis

Worldwide, the intensity and frequency of disasters is increasing (Bankoff, 2001; Drolet et al., 2015). Between 2005 and 2015, disasters affected 1.5 billion people and displaced 144 million (United Nations Office for Disaster Risk Reduction [UNISDR] 2005, p. 10). Though disasters are often considered to be unavoidable consequences of a natural hazard, more nuanced scholarship has shown that they are multi-faceted, highly contextual events which reflect the existing vulnerabilities in society (Enarson & Morrow, 1998; Gaillard, 2010). In many societies, vulnerable groups include women, single-parent and low income households, children and the elderly (Bradshaw, 2004). Disaster Risk Reduction (DRR) is a field of research and practice which aims to reduce an individual, group or populations' vulnerability to disasters, while increasing their capacity to cope with these hazards (Blaikie, Cannon, Davis & Wisner, 2014; Mercer, 2010). This is achieved through prevention, preparedness and mitigation activities (Gaillard, 2010; Pettengell, 2010). DRR practitioners acknowledge that vulnerability is a product of social, political and institutional factors, such as political prejudice, gender discrimination or unequal distribution of wealth (Gaillard, 2010; Wisner & Gaillard, 2009).

This thesis examines women's vulnerability in disasters. It is widely accepted in the literature on disasters that vulnerability is gendered, with women often comprising the most vulnerable group, prior to, during and after disasters. Women are more likely to live in poverty, are more likely to be unfairly discriminated against in laws, and have been proved to die in disasters in higher numbers than men (Bradshaw & Fordham 2013; Morrow & Phillips, 2008; Seager, 2014). Extensive research into the contributing factors of this gendered dichotomy find that social, political and economic factors such as

patriarchal norms, political restrictions and poverty are leading causes of vulnerability for women (Enarson & Morrow, 1998a; Fordham, 2011; Morrow & Phillips, 2008). As women are often the most vulnerable in many societies, they are also the most vulnerable in disasters (Enarson, Fothergrill & Peek, 2007; Mehta, 2007). Though the circumstances of women are different in all societies, research from around the globe tells the same story, with notable work on settings including North America (Enarson and Morrow, 1998b; Fothergill 1996; Fothergill & Peek, 2004), South America (Bradshaw, 2001; Cupples, 2007), Asia (Cannon, 2002; Haider, Rahman & Huq, 1993; Le Masson, 2013; Veena & Kusakabe, 2015), and Australia (Robertson, 1998). These studies show that gendered vulnerability exists regardless of a woman's class, ethnicity or country, though it can be intensified by these factors.

Though practitioners have recognised women's vulnerability in disasters (and by proxy, in society) for many years, gender has not been well integrated into DRR policies or practices (Enarson & Meyreles, 2004; Fordham 2004; Le Masson, 2013; Mehta, 2007). Historically, DRR and research into disasters has been male oriented and male dominated, with little understanding of women's issues – possibly due to a lack of participation from women (Enarson, 1998; Enarson & Meyreles, 2004). When DRR projects and policies *do* include gender, it can be tokenistic, and fail to account for the varied and unequal experiences between and within genders, and may reinforce negative stereotypes (Cornwall, 2003; Fordham, 2004; Sultana, 2014). This reduces opportunities for comprehensive discussion about the causes and consequences of gendered vulnerability (Neumayer & Plümper, 2007). Excluding women from DRR thus enables the root cause of gendered vulnerability to remain hidden, making it more difficult to correct.

Consequently, there is an identified need to include women within DRR policies, and account for differently gendered experiences in DRR projects (Enarson, 1998).

Throughout this research, I draw on many researchers and practitioners who critique the status quo of DRR, and whose work examines the concepts and themes of 'gender'. Researchers have concluded that beyond the accepted mainstream conceptualisation of a male-female binary, gender is a fluid construct which is performed and reproduced through social interactions (Nightingale, 2006). Academic research often associates the study of gender with women, rather than men (Enarson, 2002; Enarson et al., 2007; Enarson & Pease, 2016). However, men (and genders beyond the binary) must be included in gender analysis, as examining their lives reveals the power of gender in shaping all experiences (Enarson et al., 2007; Enarson & Pease, 2016; Fordham, 2004; Morrow & Phillips, 2008). Whilst acknowledging the value and purpose of analysing the stories from people of all genders, this thesis only examines women's experiences, using the lens of gender studies. I am only focusing on women in order to assess the alleged lack of female participation in DRR and present an argument for the inclusion of women in DRR policies. Though experiences of all genders in DRR would undoubtedly add depth to the overall study, it is beyond the scope of this research.

1.1 Why Tonga?

This thesis examines how women are represented and accounted for in DRR policies and practices, using a case study of the Kingdom of Tonga. Tonga is a constitutional monarchy, with a strong connection to traditional values, a hierarchical social system and no history of European colonisation (Campbell, 1992; James, 1983; Kaeppler, 1971). Many of the values that were present in ancient Tonga are also present today. For example, nuclear

and extended families - or in Tongan, *kainga*[1] - are key pillars of society, which is reflected in social event such as funerals or graduations (Gailey, 1996). The traditional system of settlement is also in effect. Islands in Tonga are separated into districts which are then separated into villages (Bott, 1981; Kennedy, 1958). Though rural and urban villages may be different in size and amenities (as seen in Figures 1.1 and 1.2), they all act as small communities[2] within a larger area, and are all represented by a town and district officer who are elected by the people (Bott, 1981).

Tonga was chosen as a case study for several reasons. Firstly, the government has signed both the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) and the Paris Agreement from Climate Change Adaptation (CCA), 2015. These are the most significant international frameworks which guide DRR and CCA. Though these are technically different fields, as climate change has become a significant risk factor for disasters, CCA can be understood as part of DRR. The vast majority of countries in the world have signed these documents, indicating a global consensus on the importance of reducing the risk of disasters and climate change. Tonga's signing of these documents indicates its commitment to DRR and CCA. In Tonga, actions for DRR and CCA are guided by in the Joint National Action Plan (JNAP), which has integrated DRR and CCA. However, there is also is an additional climate change policy. At the time of the fieldwork, Tonga was in the process of reviewing and replacing the JNAP. The second JNAP is due in 2018, and will have a stronger focus on gender than its predecessor. Other relevant policies

[1] Kainga is an indigenous word which is fluid in meaning but generally refers to all relatives who have consanguineous relation. It can therefore denote a large kin group or extended family. At the time of European arrival, kainga was used to describe a person's relatives, as there was no word for a nuclear family – the modern word 'famili' is based off the English word (Kaeppler, 1971).

[2] Throughout this thesis, villages are termed 'communities'. This is based off the preference for the word community by the participants and in national policy. It is also important to note that 'local' level refers to the village level.

include the second Tonga Strategic Development Framework, and the recently reviewed Revised National Policy on Gender and Development.

Figure 1.1. A street scene in Kolomotu'a, a centre city suburb of Tongatapu. Source: Authors own, 2017.

Figure 1.2. A street scene in a village in Ha'apai, in a more rural environment. The blue building is a community hall. Source, Authors own, 2017.

Tonga was also chosen because at the time of fieldwork, many new projects and plans which advocated for women's inclusion in DRR were being implemented. In early 2017 there was completion of the Community Development Plans. These plan guide

sustainable development for each village throughout the country and explicitly prioritise and incorporate women's issues. Additionally, in late 2017, a 'Toolkit to Integrate Climate Change and Disaster Risk Management, and Gender and Social Inclusion Risks' was launched. This was a project developed by the Ministry of Finance and National Planning, in conjunction with the Pacific Risk Resilience Programme by the United Nations (UN). It aimed to mainstream gender and disaster risk into all line ministries' planning. Furthermore, small projects which addressed women and DRR were also launched and many non-governmental organisations (NGOs) were also running DRR workshops and community meetings with the explicit goal of including women. Consequently, there was a lot of movement and discussion about women's participation with DRR in the period of late 2017 when the fieldwork took place.

1.2 The Point: Research Objectives

With this in mind, this thesis aims to assess the inclusion of women in DRR policies, and examine how this informs practices. As evidenced above, there is an assumption in the literature that policies are a key mechanism for introducing and supporting gender inclusive practices for DRR at the local level. However, there is no information on the impact of these policies in practice, and there is very little research on the Pacific; even less on Tonga. Some international frameworks for DRR (such as the SFDRR, and the Framework for Resilient Development in the Pacific) have integrated gender into their guidelines, and this has filtered into some national policies in Tonga. However, the impact of these policies has not been robustly evaluated. This thesis thus aims to assess how women are represented and accounted for in DRR policies in Tonga, and examine the impact of these policies in practice. To do so, it asks three questions:

1. What is the state of female participation in DRR in Tonga, both in practice and as outlined in policies?
2. How do DRR policies inform practices in Tonga?
3. What are the challenges and opportunities for women's participation in DRR in Tonga?

These are contemplated and eventually answered in the remaining chapters of this thesis. Firstly, Chapter 2 provides a brief overview of the relevant literature on the causes of, and responses to disaster, with a focus on the social element of vulnerability. As explained previously, women are particular vulnerable in many societies, and this chapter will illuminate the reasons why. I will make the case with international examples that women are made vulnerable by structural forces, but that they possess unique talents and abilities which can be used to mediate the effects of disaster. Research on disasters has recently begun to suggest solutions to this gendered vulnerability, by advocating for the incorporation of gender as a factor in DRR policies and practices. This chapter will outline these initiatives, and the current state of gender considerations in DRR. At the end, I will draw together the key ideas in the literature into an overarching conceptual framework which proposes a guideline for best practice when including women in DRR.

In Chapter 3, I will outline the qualitative methodologies that informed the research design. Specifically, I will detail how the fieldwork in Tonga was carried out following the techniques of interpretivist and feminist methodologies, and detail how I analysed the data through content analysis. I will then discuss how my position as a young, *pālangi*[3] woman affected the research, both in terms of ethical considerations and data collection.

[3] Pālangi is the Tongan word for a white person, regardless of nationality.

As I was doing fieldwork in a foreign country, it was important to think about the cultural norms, the power dynamic, and how I was influencing the participants. Curiously, my position as an 'outsider' assisted my research in many ways, and allowed for respectful and sensitive dialogue on many occasions. These musing are detailed in this chapter.

Chapter 4 then presents some contextual information on Tonga, and attempts to explain the social and political factors that shape people's lives within the small island nation. I will discuss the hazards associated with living in Tonga, in particular the impact of Tropical Cyclone Ian and the 2009 tsunami in the Niua's island group, and show how these are discussed and understood in the national consciousness. I will then introduce the frameworks which guide DRR at the international and regional level, and how these have been translated into Tongan policy. Though Tonga has several robust policies which guide DRR and wider development, the integration of gender in these can be limited. However, there has been significant progress made on this subject in the last four years. A close examination of the existing policies will be provided in this chapter.

In Chapter 5, I will present and analyse the many detailed interviews that were held in Tonga, and the contents of the relevant policies, comparing these to the suggestions made in the conceptual framework. Firstly, I will discuss how all key stakeholders in Tonga recognised the value of women's involvement in DRR, regardless of the recommendations in national policy. Including women in DRR was stated to be essential to reduce women's vulnerability and ensure that all pre and post disaster practices were well received. Secondly, I will examine the familial, local and national level factors which can impact and shape women's roles and responsibilities in disasters and DRR. These factors can hinder or facilitate women's involvement in DRR, and the data suggests that they must be taken into consideration when designing and implementing DRR strategies. Lastly, I will

summarise the current actions and initiatives in Tonga which are gender inclusive, and outline the role of non-governmental groups in DRR.

In Chapter 6 I will pull together the contextual information and the outcomes of the data analysis and confront these to the expectations for best practice DRR as established in the literature. Though Tonga has distinctive cultural practices, much of the data draws to the same conclusions that are presented in the literature, primarily that women are vulnerable due to their social, economic and political situations. This vulnerability is exacerbated in times of disaster, as seen in the testimonies of the research participants. However, Tonga is also unique in that women are the most active in community DRR, despite there being very little national mandate in the disaster related policies. In the second half of this chapter, I will examine the reasons for this anomaly, and discuss how the cultural norms and traditional values of Tonga both serve to marginalise and empower women. Lastly, I will state how the case study of Tonga presents new information around women's inclusion in DRR, and questions existing claims about the role of DRR practitioners and policy makers.

Chapter 7 will then conclude the research and summarise the implications for future research, in particular for practitioners and researchers who make claims about the proper way to do DRR (myself included).

Chapter 2: A Review of the Literature on Disasters and Gender

2.1 Introduction

The following chapter presents a review of the relevant literature on disasters, gender, and gendered disasters. Firstly, I will outline the root causes of disaster, with an emphasis on the contrasting concepts of vulnerability and capacities, and how these impact the people's experiences of disasters. I will then introduce the aims and objectives of DRR, specifically how it challenges popular assumptions that disasters are inevitable and uncontrollable. Next, I will briefly summarise the current state of research on gender, and discuss the links between gender and the environment. This will lead into a critical examination of the inclusion of gender issues in DRR, both in policy and practice. I will provide justification for the inclusion of women in DRR by outlining how women's everyday lives are constrained by gendered social practices, unequal political systems, and biological factors. Lastly, I will collate the recommendations in the literature into a framework for best practice to be followed when designing and implementing gender inclusive DRR.

2.2 What is a Disaster?

Disasters occur when a natural hazard affects a vulnerable population, causing disruption to the functioning of a society or community and exceeding the ability of the affected population to deal with it (Cannon, 2008; Gaillard, 2007; Mercer, Kelman, Suchet-

Pearson, & Lloyd, 2009). This conceptualisation of disaster – often labelled the 'vulnerability paradigm' - requires a natural hazard *and* a pre-existing vulnerable population (Cannon, 2008). A natural hazard is the environmental phenomenon which threaten populations and their assets (Cannon, 2008). Vulnerability is defined as the characteristics of individuals, communities and populations which increase their susceptibility to the negative effects of a natural hazard (Gaillard, 2010). Vulnerability is highly contextual but is generally caused by poor social and political leadership which encourages uneven distribution of power and resources within society (Fothergill & Peek, 2004; Gaillard & Mercer, 2012; Wisner & Gaillard, 2009). Poverty can also be a major driver of vulnerability, as people with less income are more likely to have hazardous occupations, are more likely to feel the negative financial effects of a disaster, and are less able to access resources (Cannon, 1994, 2008; Fothergill & Peek, 2004). The failure of governments to deal with issues around land use, population distribution and environmental degradation also increase vulnerability (Comfort et al., 1999). Disasters are therefore events whose impact is socially produced and highly contextual (Cannon, 2008; Comfort et al., 1999; Enarson & Morrow, 1998a). They tend to reflect the existing stratifications in society, making visible the already marginalised (Bankoff, 2001; Enarson, Fothergill & Peek, 2007; Gaillard & Mercer, 2013).

Though people may be vulnerable, they also have capacities. These are the resources that people can access to reduce their vulnerability to natural hazards. They include traditional knowledge of their environment, access to strong social networks, and relevant skillsets (Davis, Haghebaert & Peppiatt, 2004; Gaillard, 2007). Capacities are an essential factor in how well a person prepares for and responds to disasters (Enarson & Chakrabarti, 2009). However, an individual's capacities may be constrained by factors

such as age and gender, or larger structures such as rights to property (Briceño, 2002; Enarson & Morrow, 1998a). Increasing capacities and reducing vulnerability is crucial for building resilient communities. Resilience is an elusive concept with multiple meanings that emerged in the 1970s (Gaillard, 2007). Within the context of disasters, it can be defined as the capacity of individuals or groups to utilise resources which sustain their wellbeing, or allow for positive changes, particularly in times of hardship (Drolet et al., 2015; Johnston, Becker & Paton, 2012; Pettengell, 2010). Using this definition, the more resilient a society is before a disaster, the more likely it will be able to access those resources to overcome the damage wrought by a hazard (Cannon, 2002; Gaillard, 2007). Resilience of a population or individual is determined by the pre-existing condition (taking into account socially and politically constructed vulnerability and capacity), and the nature of the hazard (including the geographical impact) (Gaillard, 2007). Increasing resilience is therefore achieved through various methods, particularly the evaluation of the social and physical processes which have led to vulnerability (Fordham, 2004).

2.2.1 How do we Deal with Disasters?

To successfully reduce disaster risk, it is important to address the root causes of vulnerability, both for a country and individual (Enarson et al., 2007). To address the impact of disasters through a vulnerability lens, practitioners and researchers utilise the policies and practices of DRR. DRR is the practice of reducing disaster risk by analysing and managing the causal factors of disaster (Schipper, 2009; United Nations Office for Disaster Risk Reduction, 2009). The relatively new policy sphere of CCA is included within DRR. CCA aims to reduce and mitigate the current and future impacts of climate change by implementing adaptation strategies to enhance capacities locally, nationally and internationally (Collier et al., 2009; Prabhakar, Srinivasan & Shaw, 2009). Though these

fields are traditionally separate, CCA fits within existing DRR frameworks as they share common goals of reducing vulnerability to natural hazards and increasing the capability of people to anticipate, cope with, and recover from disasters (Birkmann & von Teichman, 2010; Kelman, Gaillard & Mercer, 2015). Failure to formally incorporate these two approaches has led to isolated development of each field, resulting in poor investments and policy inconsistencies (Schipper, 2009). Consequently, many have called for formal integration of DRR and CCA frameworks at an international level (Collier et al., 2009; O'Brien, O'Keefe, Rose, & Wisner, 2006; Prabhakar et al., 2009).

DRR therefore encompasses the frameworks, interventions and approaches that work to anticipate, mitigate and reduce disaster risks, including climate change (Schipper, 2009). This is achieved by promoting disaster preparedness and awareness throughout all levels of society, whilst increasing the capacities and overall resilience of vulnerable populations through local and national policies and practices (Thomalla, Downing, Spanger-Siegfried, Han, & Rockström, 2006). Dominant DRR policies often reflect a hazard driven perspective, and emphasise the transfer of knowledge from Western experts to laypeople to control and monitor hazards (Bankoff, 2001; Cannon, 2008; Gaillard & Mercer, 2013; Kelman, Mercer & Gaillard, 2012). This style of DRR has been criticised as it does not recognise the value of local people's knowledge and experiences, and promotes practices which perpetuate vulnerability (Gaillard & Mercer, 2013). The vulnerability perspective on disasters has challenged this top down approach, and encouraged a shift from post disaster response to a more proactive pre disaster approach (Fordham, 2004; Gaillard & Mercer, 2013). This perspective recommends evaluation of the social and physical processes which contribute to an individual's vulnerability, such as the political context which may enable a hazard to become a disaster (Fordham, 2004). Though many

international policies have adopted these ideas (see the Sendai Framework for Disaster Risk Reduction), national DRR policies are often very hazard-driven (Gaillard & Mercer, 2013). There is further separation between local and national scales, with national governments often utilising dominant, top-down strategies which do not give voice to communities or local actors (Gaillard & Mercer, 2013).

In response to this gap between the two paradigms and the consequential chaotic implementation of DRR, Gaillard and Mercer (2013) propose a framework for best practice which recognises the value of different types of knowledge and actions for best practice DRR. This framework (seen in Figure 2.1) is presented in the context of disasters,

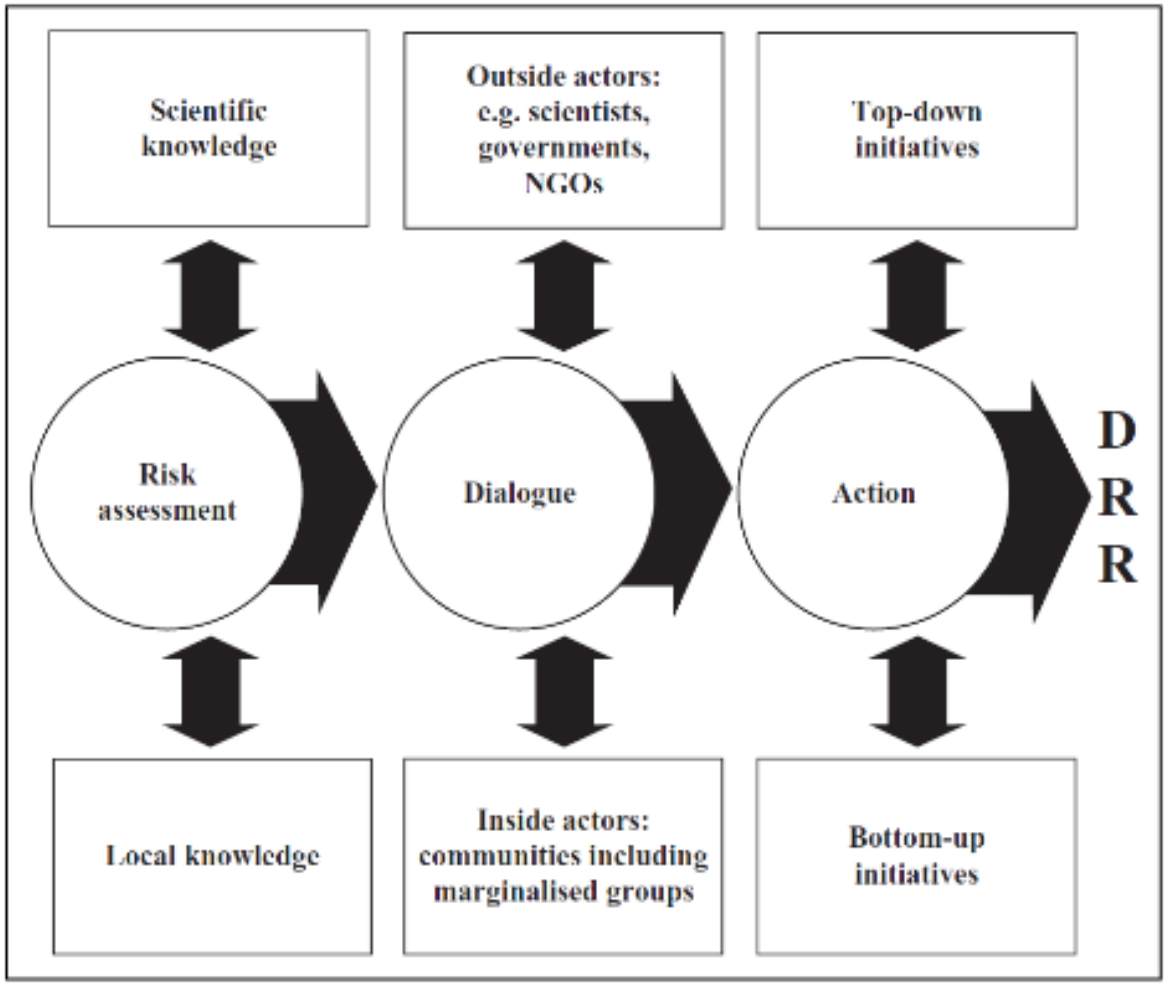

Figure 2.1. Framework for best practice DRR which integrates knowledge, actions and stakeholders. Source, Gaillard & Mercer, 2013.

but can be applied to development at large. Within this framework, both scientific and local knowledge are required to implement holistic, context–specific DRR policies and practice. Either/or will be inadequate to provide the solution to development challenges (Agarwal, 1995; Briggs, 2005). To enable the integration of knowledge from different sources, policy makers and practitioners should facilitate dialogue between relevant stakeholders, including actors at the community level. This is essential to ensure that vulnerable and marginalised groups are acknowledged in policy making. Lastly, to fill in the gaps between the hazard and vulnerability paradigm, DRR actions should integrate top down and bottom up initiatives. In isolation, neither will succeed in the long term (Gaillard & Mercer, 2013).

2.3 How Gender Shapes Human Experiences

Gender is a key component in human existence, which influences all aspects of social life, and shapes a person's identity (Enarson, Fothergill, & Peek, 2018). Traditionally, gender has been defined in academia and wider society as correlating to a person's biological sex; either male or female (Alway, Belgrave & Smith, 1998). However, more nuanced scholarship has concluded that a person's gender can transcend this binary categorisation, as biological sex is merely the skeleton upon which different identities are built (McDowell, 1999). Gender is also fluid and produced through public discourse (Nightingale, 2006). Gendered identity and the associated roles are therefore learnt through social interactions (Agarwal, 1994; Ariyabandu, 2009). Gender can thus be defined as "a social *relationship* of difference and inequality that organizes and affects all dimensions of social life, rather than a *role*" (Alway et al, 1998, original emphasis).

Feminist scholars take particular interest in gender as their research examines how gender, ethnicity, and sexuality intersect with privilege and oppression in society (Kleinman, 2007). Women are often unfavourably affected by their gender, be it through discrimination, sexism, or violence. In particular this is seen in patriarchal societies, where the characteristics, behaviour, and work of men is privileged, with limited control over decision making for other genders (Mehta, 2007; Sultana, 2014). In matriarchal societies, these systems are reversed. A key goal of feminist research and scholarship is therefore to put women in the foreground of any project, and challenge the 'naturalness' of assumed gender categories (McDowell, 1999; Morrow & Phillips, 2008). This style of research sees inequality as a consequence of the patriarchal social systems which control women through the gendered division of labour, use of violence and restricted access to reproductive services (Enarson et al., 2007). This conceptualisation of gender recognises that women are not inherently weaker than men, but are made so by the context (Enarson, 1998; Fordham, 2011). In order to do gender sensitive and inclusive work, researchers must address the power relations between genders, the cultural and social norms of a group, and how these produce gendered vulnerabilities (Enarson, 1998).

2.3.1 A Brief Introduction to the Research Fields of Gender and Development

From the mid-1970s, researchers became interested with studying the connections between the environment and gender, with a particular look at the impacts of policies on gendered inequality (Buckingham, 2004; Le Masson, 2013; Rocheleau, Thomas-Slayter, & Wangari, 1996). The goal was firstly to make women visible in development policies and projects, but over time they began to challenge mainstream development projects which had resulted in the marginalisation of women and environmental degradation (Le Masson, 2013). This was the goal of many different research fields, including Women in

Development, Women, Development and Environment, Gender and Development, political ecology and ecofeminism. While some of these disciplines are predicated on the claim that women are closer to nature, which translates to a better understanding of the environment, others assert that there is no special relationship between the two (Arora-Jonsson, 2011; Jackson, 1993; Nightingale, 2006). Though there are differences between each subject, in general they analyse the link between gendered inequality, vulnerability and environmental degradation (Enarson et al., 2007; Jewitt, 2000; Sultana, 2014).

The first comprehensive examination of gender and disasters in the international realm was produced in the 1990s (Enarson, 1998). This was the result of many calls for the integration of women's issues in development and the outcome of several international conferences. Some cite the UN as being responsible for this push as it was the 1992 UN Conference on Environment and Development that resulted in Women's Action Agenda 21 (WAA21) (Dankelman, 2002; Röhr, Hemmati & Lambrou, 2009). WAA21 recognised the value of women in sustainable development, and was designed to promote female participation in the UN Conference on Environment and Development (Dankelman, 2002). Though it was an effective lobbying tool and it promoted gender awareness, it was developed from a single meeting, not a worldwide consultative process, and grassroots women's groups consequently felt they had no ownership over it (Dankelman, 2002). Around the same time as the development of WAA21, the Fourth World Conference on Women (1995) produced the Beijing Declaration and the Platform for Action. The themes of World Conference on Women, (organised by United Nations Entity for Gender Equality and the Empowerment of Women [UN Women], with the first in 1975 and the last in 1995), were women's equality and development in a peaceful world, with subthemes of employment, health and education (Bowles-Adarkwa & Kennedy, 1997). The Beijing

Declaration set goals for the advancement of gender equality and empowerment of women in 12 areas, including poverty, education, health and violence (UN Women, 1995). It was signed by 189 countries and was a defining moment in the international agenda for gender equality. Gender equality has since been identified as a key Millennium Development Goals, and most recently, one of the 17 sustainable development goals (SDGs).

The mid 1990s can therefore be considered the beginning of the international push to recognise gendered inequality and attempt to rectify that through policy. The first Conference of the Parties (COP) in 1995 – which is the formal meeting of the United Nations Framework Convention on Climate Change – hosted 200 women at a forum to discuss their views on climate change (Röhr et al., 2009). The first mention of women in the text of the COP documents was COP7 in 2001 after a delegation from Samoa called for gender equality during the deliberations (Dankelman, 2002; Enarson, 2009; Röhr et al., 2009). COP11 in 2005 saw the reintroduction of gender through the drafting of a paper which identified key areas for gender to be incorporated into CCA policies (Röhr et al., 2009). However, gender did not appear in international frameworks for DRR until the early 2000s. The Hyogo Framework for Action (2005-2015) was the first international DRR policy to call for the integration of a gendered perspective into DRR policies, plans and processes (Enarson, 2009; Röhr et al., 2009). The current international DRR framework – the SFDRR – accounts for gender in the guiding principles and throughout. However, it is unclear what effect these international recommendations have had, either on national policy or in practice.

2.4 Disasters Are Gendered

One thing is clear. As Seager puts it, "the primary takeaway conclusion from the literally hundreds of studies and reports is a deceptively simple one: disasters are gendered in every aspect" (2014, p. 265). Women are one of the most vulnerable groups in disasters (Mehta, 2007). They are thought to be seven times more likely to die than men (Bradshaw & Fordham 2013), struggle to re-establish themselves post-disaster, and often feel negative long term social and economic effects (Alway et al., 1998; Fothergill, 1996; Hines, 2007). Though gender is not the direct cause of vulnerability, in certain situations it contributes to it (Veena & Kusakabe, 2015). Gender influences vulnerability as it places men and women in different positions in society when a disaster occurs (Enarson et al., 2018). Women's vulnerability to natural hazards therefore reflects the existing vulnerability that women face in society prior to a disaster (Enarson et al., 2018; Le Masson, 2103). The societal, structural and physical factors which contribute to women's vulnerability but also enhance their capacities are laid out in the following text.

2.4.1 Societal Factors: How They Contribute to Gendered Vulnerability

The often unmatched death toll for women in disasters reflects the pre-existing gendered inequality in society. This is particularly visible in patriarchal societies which value men's contributions over women's (Cannon, 2002; Fothergill, 1998, 1999; Fordham, 2011). Enarson et al state that disasters are "symbolically governed" by imagery of powerful, resourceful men, which perpetuates the patriarchal stereotype that women are helpless and require a male saviour (2018, p. 213). Furthermore, in these societies, the power and privilege to control land, access to education, public spaces and the female body is in the hands of men (Enarson & Morrow, 1998a). In extreme cases, women will have restricted

access to schooling, or be dependent on the environment for food and shelter (Ariyabandu, 2009; Austin & McKinney, 2016; Chakrabarti & Ajinder, 1994). The consequences of this value system is demonstrated in the case of the 1991 Bangladesh floods, where a father chose to save his son rather than daughter, with the justification that the boy was more valuable as he could carry on the family line (Haider et al., 1993).

Patriarchal systems also increase women's vulnerability in disasters, as they are often less able to make informed decisions for their household or their own safety (Enarson, 2000). Studies have shown that men have a lower risk perception than women (Enarson, 2000; Bradshaw & Fordham, 2015). Women are more likely to pay attention to emergency warnings; are more likely to perceive a disaster as dangerous; and will spend more time and money preparing for a disaster than men (Enarson et al., 2007; Fothergill, 1998, 1996; Mehta, 2007). However, a lack of information or existing power dynamics in the household means that women may not be able to act on a warning (Fothergill, 1996; Tyler & Fairbrother, 2013). In cases where men are more dominant, women's social conditioning may also make them risk adverse, and unable to make decisions without the approval of an authority figure (Arora-Jonsson, 2011).

Women are also made vulnerable if there is a social expectation to conform to gender roles. Because of these expectations, women are often the primary caregivers of relatives and children, and studies have shown that this role limits their survival in time of disaster (Fothergill, 1999, Morrow & Phillips, 2008; Sultana, 2014). A clear example of this is the 2005 Kashmir earthquake, where many women died when the buildings collapsed while they were inside looking after their children (Hamilton & Halvorson, 2007). Women also have less opportunities due to the gendered division of labour, and reports show that they are less likely to find new jobs following a disaster (Fordham, 2011; Morrow &

Enarson, 1996). Women may struggle emotionally and financially if their employment is lost post disaster, as a career is important for a woman's identity, and being a full-time homemaker is very isolating (Fothergill, 1999). Researchers also report that a women's caregiving role in the home and wider community increases post disaster (Enarson, 2013; Enarson & Fordham, 2001; Hines, 2007; Mehta 2007). This phenomenon was identified in Florida, USA following hurricanes in the mid-2000s, and in Bodin, Pakistan after major floods in the early 2010s (Drolet et al., 2015). These countries have vastly different wealth and gender inequality (as measured by the Gender Inequality Index by the UN) (Drolet et al., 2015). These cases (and several others) highlight the universality of the gendered division of labour, suggesting that some female experiences transcend class and wealth.

2.4.2 Structural Factors: How They Contribute to Gendered Vulnerability

Further factors which contribute to women's vulnerability are the structures in society which are controlled or influenced at the national level. Poverty is a major driver of vulnerability, as poorer people are more likely to feel the negative financial effects from a disaster, and are less able to access resources to counter the effects of these events (Cannon, 2008; Fothergill & Peek, 2004). Though poverty and vulnerability are not synonymous, the presence of poverty will diminish a person's coping strategies (Arora-Jonsson, 2011). Unfortunately, women are more likely to live in poverty than men (Anderson, 1994; Seager, 2014; Wiest, 1998). At the fourth UN Conference on Women, it was stated that 70% of the world's poor were female (Chant, 2006). However, this statistic has never been scientifically proven, so there are doubts about its claims (Chant, 2006; Enarson et al., 2018). Regardless, some studies note that women generally use their income on household and caregiving needs, so have less financial resources to utilise in

times of disaster (Bradshaw, 2004). Women are further disadvantaged as their work in the informal economy is often invisible, and consequently their financial losses after a disaster may hidden from official reports (Enarson, 2000; Enarson & Morrow, 1998a). The literature also suggests that women are less likely to return to paid employment post disaster, which has consequences for her family's finances and as detailed previously, her mental health (Fothergill, 1999).

These problems are confounded in single parent households with the female as the head (Bradshaw & Fordham, 2015). Female headed households have been found to be "asset-poor", generally lacking social or economic resources required to deal with disasters (Bradhsaw & Fordham, 2015, p. 235; Bradshaw, 2004; Enarson & Morrow, 1998a). This rests on the assumption that female headed households are poor in pre-disaster times, which is not always true (Bradhsaw & Fordham, 2015). However, these households are also vulnerable because women must make decisions in the dual role of caregiver and 'asset protector' which can lead to greater losses (Bradshaw, 2004). Additionally, relief programmes may exclude women by assuming a man is the head of the house, thereby restricting access to post disaster aid for single mothers or widows (Enarson & Morrow, 1998a).

The vulnerability of female headed houses can be further exacerbated by discriminatory laws and inequality in the political system (Austin & McKinney, 2016; Morrow & Phillips, 2008). In some countries (including Tonga), there are legal restrictions on female land ownership (Agarwal, 1994; Veena & Kusakabe, 2015). When women only have usufruct or indirect rights to land, they have to rely on their relationships and affiliation with male relatives, and therefore their access depends on the continuation of their positive association with the family member (Veena & Kusakabe, 2015). Access to land would

have direct advantages for women as it would act as an economic asset (Agarwal, 1994). Women without access to land tend to have slower rates of recovery, as they have less social capital to pull from in times of hardship (Veena & Kusakabe, 2015). It is therefore clear that economic and political empowerment for women results in greater overall wellbeing and a higher ability to prepare for disasters (Austin & McKinney, 2016). Improving women's economic and social status will therefore reduce the overall vulnerability of a nation (Austin & McKinney, 2016; Fordham, 2004).

2.4.3 Biological Factors: How They Contribute to Gendered Vulnerability

Though gendered vulnerability is frequently the outcome of gendered social norms and patterns of labour, there are also a few biological factors which influence this. Firstly, though women are not always victims, there are certain forms of violence and domination that they are subjected to (Enarson, 1999; McDowell, 1999). For example, women have a greater risk of suffering from domestic violence or sexual assault, regardless of the presence of disaster (Ariyabandu, 2009). Additionally, research shows that post-disaster, there is a reported increase in domestic violence (Enarson, 2002; Enarson et al., 2007; Wilson, Phillips & Neal, 1998). Sety, James, and Breckenridge cite six studies from the USA and New Zealand that report post-disaster increases in calls, protection orders and arrests by the police for domestic violence (2014). Police protection for abuse victims may decrease following a disaster and some women may also be forced to return to abusive situations to survive, making the period extremely dangerous for them (Enarson, 1999; Enarson et al., 2007). However, while research shows the frequency of violent assault increases after disaster, it is usually among those who report violence before the disaster (Enarson & Fordham, 2001). Following the Grand Forks flooding in 1997, there was a 21% increase in crisis calls, though the majority were concerning pre-existing

abuse cases (Enarson, 1999). This suggests that a disaster merely exacerbates existing violence, and a robust response to domestic violence prior to disasters would reduce women's vulnerability in general (Enarson, 1999).

Women's reproductive abilities also can increase their vulnerability during and after disasters. The extra needs of pregnant and lactating women are often not considered in relief packages and camps may lack female doctors or sanitary products (Bradshaw, 2004; Chakrabarti & Ajinder, 1994). Women are vulnerable to exploitation and violence in overcrowded camps and lactating or pregnant women will be less mobile than men (Mehta, 2007; Hines, 2007; Morrow & Enarson, 1996). Additionally, social taboos around menstruation exacerbate the stress on women in relief camps and women's reproductive health can decline post-disaster, with reports of pregnancy loss, stillbirth and miscarriage (Chakrabarti & Ajinder, 1994; Neumayer & Plümper, 2007).

2.4.4 Super Women: The Unique and Important Contributions of Women

Though women are often labelled as victims, the literature also documents their skills and capacities that are essential for good DRR (Briceño, 2002; Fordham, 1998; Fordham, 2008). Though the circumstances of women's position in society and their household can reflect their vulnerability, so too can they highlight the capacities and strength that women possess (Le Masson, 2013). Disaster can provide women with an opportunity to learn what they are capable of, when the regularity of everyday life disappears (Delica, 1998). Women have unique skills and access to different resources than men (or other gender identities) do (Enarson, 1998). Socially prescribed gender roles which discourage women's work in the formal labour force often result in women's participation in informal community spaces, particularly in relation to schooling, childcare and

healthcare (Enarson, 1998; Enarson et al., 2007). These positions can produce strong relationships and connections to the community that can be utilised in times of disaster (Enarson, 1998). Additionally, women are often at the forefront of disaster organising efforts and hold key leadership roles in the community (Enarson & Morrow, 1998a; Mehta, 2007). As it is the local level that disasters have the biggest impact, these women-held positions are key in preparing for and responding to disasters (Gaillard, 2010; Satterthwaite, 2011).

Another important function of DRR work at the local level is providing detailed information on the community to the government (Satterthwaite, 2011). Women are key players in this regard, as they tend to outnumber men in emergency groups, despite their underrepresentation in emergency management (Fothergill, 1998). Research shows that female leaders are also better than men at visualising problems relating to health and education – key areas for successful DRR – and they show more interest in their community commitments (García & Zúñiga, 2009). This can be seen in the rebuilding of Miami, Florida following Hurricane Andrew in 1992, where fifty local women's groups created a coalition named 'Women Will Rebuild', in protest against the male dominated leadership of the recovery process (Enarson & Morrow, 1998b; Morrow, 1996). Their efforts led to female representation on the relevant boards and committees, and resulted in women's needs becoming more visible (Enarson & Morrow, 1998b).

Women's participation in religious groups may also be another avenue for capacity building. Though there is evidence that religious groups can place significant demands on their congregation in times of hardship, there are many positive consequences of religious affiliation (Gillard & Patton, 1999). Religious groups are often embedded in the community prior to a disaster occurring and are therefore well placed to offer vital

assistance in times of need (Bolin & Bolton, 1986; Gaillard & Texier, 2010; Gillard & Paton, 1999). This is seen in examples from Hurricane Sandy in the USA in 2012, where religious congregations were able to offer aid; and in Typhoon Haiyan in the Philippines in 2013 when affected communities went to their churches for help (McGeehan & Baker, 2017). Religious leaders also have considerable influence over their communities, and if there are existing relationships between them and DRR practitioners, they can serve their communities more efficiently in times of disaster (McGeehan & Baker, 2017). This is evident in studies of the role of the Church of Jesus Christ of Latter-day Saints (LDS), which advocates for disaster preparedness among its congregation (McGeehan & Baker, 2017). Belonging to a religious group can thus be a source of considerable material support for women (Gillard & Patton, 1999).

2.6 A Critique of Existing Practices of DRR: A Gender Perspective

Despite there being much evidence that women are disadvantaged by their gender with regard to disaster mitigation, adaptation, decision making, and capacity building, and are therefore extremely vulnerable in disasters, DRR rarely includes a female perspective (Enarson & Meyreles, 2004; Fordham 2004; Le Masson, 2013; Mehta, 2007). When gender is incorporated into DRR it is often as a variable to describe the dead (Enarson & Meyreles, 2004; Fordham, 2004). Many DRR projects and policies are explicitly male oriented and dominated, and women are often excluded from post-disaster decision making about recovery strategy (Ariyabandu, 2009; Enarson, 1998; Enarson & Morrow, 1998b; Fordham, 2004). As male practitioners will have limited knowledge of women's specific needs, the resulting DRR practices will be ill-informed (Ariyabandu, 2009; Fordham, 1998). Decision making around climate change has also been historically male,

even though the effects of climate change will be felt more intensely among poorer people, which women seem to be (Röhr et al., 2009). The result is that though DRR is assumed to be gender neutral, it is implicitly and explicitly grounded in men's experiences (Fordham, 1998; Morrow & Phillips, 2008). As the root cause of vulnerability is an inability to access resources to cope with disasters, and women tend to have less access; then women will be more vulnerable than men (Bradshaw & Fordham, 2015). Consequently, male focussed DRR initiatives will be ineffective in addressing the needs of the most vulnerable (Dankelman, 2002; Fothergill, 1998; Valdés 2009).

Attempts at gender inclusive DRR can also be critiqued. Firstly, women's voices may be suppressed in 'participatory' processes which are poorly designed and consequently perpetuate inequality or male dominance (Cornwall, 2003; Kumar, 2002). This approach to DRR marginalises women and reinforces the power of men (Ariyabandu, 2009; Enarson, 1998). Secondly, there is a tendency to view women as a homogeneous group (Cornwall, 2003; Fordham, 2004; Sultana, 2014). Women are often stereotyped as passive and subordinate, fulfilling the caregiving role (Ariyabandu, 2009; Fordham, 2004; Mehta, 2007). This reinforces negative gender roles, and ignores the needs and experiences of women who don't fit that stereotype (Fordham, 2004). An example of this is the practice of including a token woman in DRR policies or practices who is then assumed to speak for the whole gender (Cornwall, 2003, 2008). Female experiences are not universal but are shaped by many factors, including class and race (Enarson et al., 2007; Mehta, 2007; Nightingale, 2006). Though some female experiences do cut across class and race (as evidenced by the research into women's role as caregiver by Drolet et al., 2015), these factors will strongly influence individual women's ability to prepare or respond to disasters, thereby creating a cycle of vulnerability (Hamilton & Halvorson,

2007). Gendered vulnerability is thus reproduced by DRR projects which are attempting to reduce it (Enarson, 1998).

A further critique can be made in regard of the tendency of DRR projects to value women for their supposed innate and natural understanding of the environment. Some authors state that women have an innate female knowledge about the environment as they are primary users of natural resources (Enarson & Morrow, 1998a; Fothergill, 1999; Jewitt, 2000; Mehta, 2007). This 'female knowledge' is conceptualised as a valuable source of 'local knowledge'. Local knowledge includes the knowledge that is attained through experiences, relationships and practices (Mercer et al., 2009). Female local knowledge about the environment is passed down through generations by older women and is considered to be an important resource that groups can utilise to reduce vulnerability (Enarson, 1998; Mercer et al., 2009). Female local knowledge may be lost in DRR which uses a 'gender neutral' approach. However, some authors note that these conceptions of a special female-only, environmentally sound knowledge romanticizes the interaction between women and their environments (Agarwal, 1995; Briggs, 2005; MacGregor, 2009; Sultana, 2014). Jewitt (2000) suggests that it is unlikely that women have a special relationship with the environment simply because they are women. As women are not a homogenous group, their relationship and experiences with the environment will not be the same. They may be involved in environmental stewardship *or* environmental degradation simply because it suits them (Jewitt, 2000; MacGregor, 2009). To properly utilise the knowledge that women possess (in this case, the knowledge that men *don't* possess), DRR practitioners therefore should address the cultural, political and economic context within which it is embedded (Briggs, 2005).

Thus there is a clear imperative to include consideration for gender within current DRR policies and projects. Including gender analysis in DRR will highlight the social inequalities which make women susceptible to risk; it will make visible the needs of women in disasters, and; it will increase the pool of ideas and talents that are available to practitioners and policy makers (Enarson, 1998; Mehta, 2007; Morrow & Phillips, 2008). It will also highlight women's roles as survivors and responders rather than victims in disaster (Enarson & Morrow, 1998a). Furthermore, it will improve their recovery as acknowledging and legitimizing the jobs that women do as part of the informal economy (such as agricultural work or childcare) ensures that women are accounted for in relief packages (Briceño, 2002). Participation in DRR projects can also increase self-reliance, and when women are more resilient, they are able to be flexible, and utilise varied adaptive strategies to mitigate risk (De Souza, Henly-Shepard, McNamara, & Fernando, 2015; Kumar, 2002). Following the recognition of the value of women in DRR, Bradshaw (2004) proposes an analytical framework to assist with gender sensitive analysis of pre and post disaster needs. An adaptation of this is seen in Table 2.1. This framework is intended to enable an organisation to assess the impact of disasters on different groups within the community, as well as identify the capacities of men and women to mitigate and reduce the effects of disaster (Bradshaw, 2004).

These questions are intended to place women at the fore front of DRR, and force policy makers and practitioners to engage with the intersection between gender and vulnerability. By acknowledging how people's roles, responsibilities, experiences and vulnerabilities are gendered, researchers and practitioners can examine the contextual and cultural reasons behind the decisions men and women make in disasters (Enarson, 1998).

Aspect	Questions
Needs assessment	What are the priority needs of women and men? How can we address these needs? What capabilities exist in the community? Which problems require intervention? What type of intervention is needed?
Activity Profile	Who did/ is currently doing what? Where and when are these activities done, and what are the risks associated with them? What is the gendered division of labour? What is the significance of the division, power relations, the vulnerability of individuals, etc.?
Resources, access and control	What resources do men and women use to carry out their activities? Have they lost these resources as a result of a disaster? How do different genders use and control new resources? What are the effects in terms these power relations?
Limitations and opportunities	What kinds of vulnerability face various people in the community? What differences exist in terms of power, access and control of resources? What capabilities, skills, knowledge and strategies do people in the community possess? What laws, policies or rules are relevant to this situation and what are their outcomes? What financial resources are available and who has access to them? What sort of information and skills do community organizations have, and what are they lacking? What sort of planning, monitoring and evaluation processes exist? Do they include women? If not, how can they be addressed?

Table 2.1. Guiding questions for DRR practitioners to ensure their projects are gender sensitive and inclusive. Source: Adapted from Bradshaw, 2004.

Furthermore, Graham (2001) states that to do a holistic gender analysis in relation to disasters, it is crucial for DRR practitioners to address the scale within which DRR occurs. This includes the macro, meso and micro levels, specifically the high level policies and plans which guide DRR and development; the institutional structures in society which link the local and national levels, and; the livelihood strategies that are employed by women in their homes and communities (Enarson, Fothergill & Peek, 2018; Graham, 2001). These scales are also integrated into the DRR framework by Gaillard and Mercer (2013), presented in Figure 2.1. The importance of the role of non-governmental org as

stakeholders in DRR also becomes clear when recommending that work is done at many scales. NGOs have come to be an alternative to a top down, government driven disaster management, as they can build up key relationships with community members, and advocate for their concerns at the national level (Izumi & Shaw, 2012; Shaw, 2003). NGOs are therefore able to collaborate with many stakeholders and coordinate DRR at different levels, so they are able to implement more changes than other organisations who don't have as large a reach (Djalante, 2012).

2.7 A Framework for Best Practice in Gender Inclusive DRR

The following conceptual framework draws together the literature which outlines the current state of gender inclusive DRR, the critiques on this, and the recommendations given by many researchers and practitioners. This framework presents three key areas to assess the integration of gender into key DRR frameworks and policies, and the impact of these in practice (as informed by the interviews).

The first key area is accounting for the integration of gender specific knowledge into DRR policies and practices. DRR practitioners and policy makers should take into account how the daily lived experiences of women produces gendered knowledge, and assess the factors that may contribute to their vulnerability or contribute to capacity building. They should also explicitly seek and promote female knowledge in any guiding frameworks or policies. The second key area of the framework is to address the possibilities and limitations of including women as key stakeholders in DRR. Policies should take into account the relationships and positions that women hold in the community and wider society, and how this may affect female engagement with DRR at the local and national scale. Projects should be designed so that women are not excluded due to their

relationships or positions in society. The final area of the framework guides the actions and initiatives to include gender into DRR frameworks, which requires an understanding of the overall context within which DRR policies and practices take place.

Scale	Integrating gender-specific knowledge into DRR policies and practices	Supporting women as key stakeholders in DRR	Integrating gender concerns into DRR actions and initiatives
Policy – macro, meso **To what extent are these concepts are included in framework and policies around DRR?**	By including ➢ Knowledge and skills that women possess ➢ Women's access to resources ➢ Change over time ➢ Factors of vulnerability	By including ➢ Structural and social limitations or restrictions ➢ The role of men and women ➢ Responsibilities of women and men	By including ➢ External stakeholder roles ➢ The context within which DRR occurs
Practice – micro **To what extent are gender inclusive DRR policies and frameworks implemented, and what is their impact?**	Taking into account ➢ Gendered vulnerability ➢ The long term impact of policies	Taking into account ➢ The relationships that influence women's lives ➢ Women's position in society	Taking into account ➢ How DRR initiatives empower women ➢ Changes in women's vulnerabilities or capacities

Figure 2.2. Framework for holistic, gender inclusive DRR both in policy and practice. Source: Author own, 2018.

2.8 Conclusion

The significance and importance of including women in DRR policies and projects has been detailed in depth throughout this chapter. Women have been proven to be one of the more vulnerable groups in society, for a myriad of social, structural and biological

reasons. Despite this, women are barely included in DRR projects and policies, and consequently women die in disproportionate numbers and are impacted severely by disaster. Many researchers thus state that by including women in DRR, women's vulnerability to disasters will be lessened, and therefore their resilience to changes in their environment will be increased. These calls for a more gender inclusive framing has not been well reflected in contemporary DRR, though there has been some progress in the last 20 years. In response to this, I have produced a framework for best practice when designing gender inclusive DRR policies and projects, which collates the current literature on DRR and gendered vulnerability.

Chapter 3: A Pālangi Point of View: Towards a Feminist Methodology

3.1 Introduction

The thesis so far has explored how gendered vulnerability is produced and reproduced through inadequate policy making and implementation. However, to fully gauge the involvement of women in DRR in Tonga, it was crucial to engage with policy makers and practitioners in the field. The following chapter outlines the methodological perspectives that directed the data collection and analysis. The methodology is qualitative in design, and is inspired by a quote from Smith who says "we are accessing a representation (a vision, an image, an experience) of a text (the world of lived experience) through a text (the interview transcripts) that is itself open to interpretation" (2001, p. 29). Contained in this quote is the understanding that qualitative research produces information which is highly subjective and dependent on personal interpretation. The first section of this chapter outlines this idea in depth, with a reflection on the perspectives of interpretivist and feminist research methods. Underlying both perspectives is a rejection of the traditional valuation of scientific objectivity, and the proposal of a new methodology which acknowledges the positionality of the researcher and the modes of oppression and dominance which surround her. The research process that I chose to follow is outlined in Figure 3.1 and will be explained in depth in this chapter.

Next, I discuss the reasons for choosing a case study approach, and outline the personal experience I had while living in Tonga for two months. This period of fieldwork allowed me

to engage deeply with a variety of stakeholders, and I was able to complete many in depth interviews. In conjunction with a reflection on the interview process, I discuss further data collection methods which were employed in the study. Finally, I analyse how my positionality impacted this research, and the ethical significance of this. During my time in the field, I negotiated the dual identities of an outsider and insider, due to my position as a *pālangi* studying Tonga, but also as a woman studying women. As conducting qualitative research involves forming personal relationships, it is never free of power dynamics. Consequently, I was cautious to follow the ethical protocols as outlined by the literature and most importantly, the University of Auckland. In this last section, I discuss the value of these protocols and how I followed them.

3.2 The Value of Qualitative Methodologies

My goal for this research was to build a holistic, complex story of how women are incorporated into DRR in Tonga. For this, I chose to do a qualitative study. Qualitative methodologies are used to explore the complexities of daily life in order to illuminate social processes (Limb & Dwyer, 2001). Qualitative research often attempts to reveal an individual's experience or broader social structures by looking at the world through a wide lens (Winchester & Rofe, 2010). Smith (2001) considers qualitative methodologies to be most valuable when the researcher understands that finding the ultimate 'truth' is a futile goal. Instead, the world should be looked at and consequently studied as an assemblage of meanings, constructions and representations (Smith, 2001). These methodologies also recognise the importance of participant's thoughts and experiences so are also employed if the research involves fieldwork (Gray, 2009; Hennink, Hutter, & Bailey, 2010).

3.2.1 Situated Knowledge: Interpretivist and Feminist Perspectives

The overarching perspectives which influenced and guided the research were the philosophies of the interpretivist and feminist research paradigms. Interpretivist theory emerged in the 1970s and seeks to ‘‘understand peoples lived experience from the perspective of people themselves” (Hennink et al., 2010, p. 14). Interpretivist theories encourage researchers to recognise that we make sense of the world individually, and that the context in which we live and work defines how we do this (Gray, 2009; Limb & Dwyer, 2001). The purpose of feminist research is to reveal hidden inequalities and address the ways in which powerful people are able to mask inequalities (Gray, 2009; Kleinman, 2007). It aims to give people other than white, middle class, heterosexual men a voice (England, 1994; Le Masson, 2013). Feminist research often reflects on practices of domination, privilege and oppression, and how gender intersects with ethnicity, sexuality and class (Haraway, 1998; Kleinman, 2007).

A further goal of feminist research is to acknowledge that knowledge is situated and based on a person’s social position, age, race and sex (Gray, 2009). Mansvelt and Berg (2010) claim that this renders objectivity impossible. What is considered to be objective scientific knowledge is actually the result of a certain type of researcher conducting a certain study at a certain time (Gray, 2009; Smith, 2001). Feminist authors reject the notion that a researcher with any gender, personality, or background could produce the same ‘objective’ findings as another, and claim that research can never be removed of its bias (Haraway, 1998). Some researchers also claim that as objectivity and rationality are values prioritised by men, feminist studies should offer a different perspective (Gray, 2009). Instead, Haraway (1998) proposes a new term ‘feminist objectivity’ to describe knowledge that acknowledges the power dynamics at play in research. This departs from

dominant understandings of scientific objectivity, as it acknowledges the position of the researcher (Mansvelt, & Berg, 2010).

The previous conceptualisation of the researcher as 'objective' was supported by methodologies which placed the researcher in a position of power, controlling both the research process and passive research subjects (England, 1994; Le Masson, 2013). Feminist researchers reverse this dynamic, and focus on methodologies which build mutual respect between researcher and subject (England, 1994; Le Masson, 2013). They suggest that by recognising the subjective nature of research and encouraging diversity within this arena, scientists can create more meaningful research (Rocheleau, 1995).

3.3 Tonga: A Case Study

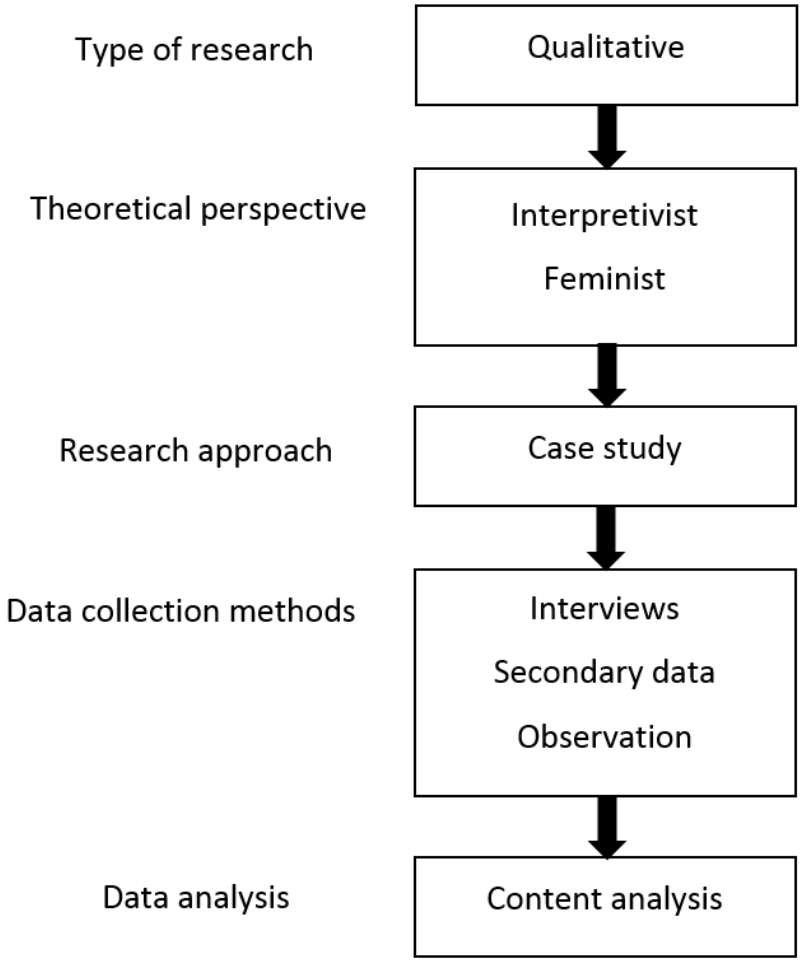

Figure 3.1. The research design. Source: Authors own, adapted from Gray, 2009.

The case study methodology is often employed in qualitative research, as it utilises several data sources, and is therefore able to compare and contrast different perspective within one study (Gray, 2009; Hennink et al., 2010). Studying participants in

their natural settings also shows how the context of people's lives influences their behaviour and experiences (Hennink et al., 2010; Hinds, Vogel & Clarke-Steffen, 1997). It also often includes data collection methods such as interviews, field observations and document analysis (Gray, 2009). Consequently, it is the desired method for research which seeks to critically examine both a phenomenon and the context within which it occurs. For these reasons, I chose to use this approach to examine the involvement of women in DRR in Tonga.

In all, I spent eight weeks in Tonga, between October and December of 2017. During this time, I lived with a local family in a central suburb of the main city of Nuku'alofa, Tongatapu. The widowed matriarch of the family was a well-educated, intelligent woman, in the process of beginning her PhD. Her family belonged to the LDS Church and she had ten adult children, most of whom had started their own families. The house was very large and family members would come and go from it. During the working week, I used a desk at the National Emergency Management Office (NEMO). I had previously met the director of NEMO and he was interested in my work so I was welcome to use their offices in an informal and relaxed manner.

During this eight weeks, I wanted to understand what daily life in Tonga is like. Outside of my research engagements I joined a gym, hung out with my new family, went to church, and made friends. During a trip to the outer island of Ha'apai, I saw the difference between the 'urban' centre of Nuku'alofa, and the 'rural' outer islands. I was able to observe how Tongan women presented themselves in the street, the church, and how they are perceived at work. I was also able to have many genuine conversations with Tongan people about the role of women in Tongan society, the importance of religion, the

power of the coconut, and so on. Though I remained an outsider while I was there, these interactions afforded me at least some insight into the cultural context of Tonga.

3.4 Data Collection Methods

This thesis relies both on primary and secondary data. Interviews were my main data source, with observations and document analysis as secondary methodology. The primary data was collected during fieldwork in Tonga, and the secondary data were collected throughout the year. Several key documents were also collected in Tonga.

3.4.1 Listening: Semi-Structured Interviews

The most valuable data collection method was the interviews with key stakeholders in the DRR field. Interviews allow for complex information to be collected from many different subjects (Bourque & Clark, 1992). They are useful to determine the significance of peoples experiences, beliefs and perceptions, and to examine the context within which they live (Gray, 2009; Hennink et al., 2010). Though other methods may provide valuable data, interviews are an efficient tool for gathering this contextual information, as participants are able to explicitly articulate their thoughts (Phillips & Hardy, 2011). As the cultural context was somewhat foreign to me, it was crucial to gain insight from as many participants as possible. Interviews may also promote trust between participant and researcher, which can encourage the participant to express themselves (Gray, 2009). This is crucial in the context of multicultural research as the researcher relies on their informants and friends to explain what is culturally appropriate (Gray, 2009).

During the fieldwork, I talked with many key stakeholders, including government ministries, civil society organisations, donor agencies, community committees and

local people.

Conducting the interviews was relatively simple, as Tongan people are receptive to phone calls and unannounced office visits. Over the two months I was there, I had face to face interviews with 33 people. A breakdown of these interviewees is provided in Table 3.1. Of the 33 participants, 26 were women. This gender bias was unintentional and accidental. I did not exclude men, but spoke with the person in the intended organisation who was dealing with disasters, disaster management or policy making. They frequently happened to be women.

TYPE	MALE	FEMALE	POSITION	#	TOTAL
Local and international NGOs [4]- development	2	5	Tonga Community Development Trust	1	7
			Tonga Community Development Trust	2	
			Tonga National Council of Churches, working in partnership with Act for Peace	3	
			Tonga Red Cross, Tongatapu	4	
			Live & Learn, (Mainstreaming of Rural Development Innovation) MORDI Tonga Trust	5	
			Caritas	6	
			Tonga Red Cross, Ha'apai	7	
Local NGO - women's issues	0	4	Ma'a fefine mo e family	8	4
			Ma'a fefine mo e family	9	
			Women and Children Crisis Centre	10	
			Talitha Project	11	
Donor and support partners	1	4	UN Women	12	5
			New Zealand High Commission	13	
			New Zealand High Commission	14	
			Pacific Risk Resilience Programme	15	
			Water, Sanitation and Hygiene Cluster, secretary	16	
Government ministry	2	7	National Emergency Management Office, Building Safety and Resilience in the Pacific	17	9

[4] This thesis does not distinguish between the local and international development NGOs as they act similarly in terms of project goals and implementation.

			Ministry of Internal Affairs, local government	18	
			National Emergency Management Office	19	
			Department of Climate Change, Adapting to Climate Change and Sustainable Energy (ACSE) project	20	
			Department of Climate Change, ACSE	21	
			Ministry of Finance and National Planning	22	
			Ministry of Finance and National Planning	23	
			Climate Change and Disaster Risk Management Project Officer, Ha'apai	24	
			Secretary for the governor, Ha'apai	25	
Community members	2	5	Community meeting organiser for Tonga National Council of Churches, from Vava'u	26	7
			Community meeting organiser for Tonga National Council of Churches	27	
			Ha'apai local, representative for women's committee, living in Koulo village	28	
			Ha'apai local from U'iha	29	
			Ha'apai local, previous secretary for the Village Emergency Management Committee, living in Fangale'ounga	30	
			Ha'apai local, previously living in Nuitoputapu	31	
			Ha'apai local, chair of womens committee, living in Pangai	32	
Other	0	1	Administration, Church of the Latter Day Saints	33	1
Total	7	26		33	

Table 3.1. Table showing the breakdown of interviewee participants. Source: Authors own, 2018.

Figure 3.2. Picture showing a relaxed interview with myself and a Tongan local, while in Ha'apai. Source: Luisa Uai Taunga, 2017.

The interviews were always semi-structured, and held in English, as all participants could speak it. Semi-structured interviews encourage different views and opinions to be explored, and give control of the interview to the participant (Gray 2009). During the process, I attempted to be very conversational, and informal, allowing for the participant to discuss subjects that were important to them. An example interview is seen in Figure 3.2. Consequently, participants felt comfortable sharing with me, and would often discuss very personal matters, including their thoughts on female empowerment and gender based violence. Many shared personal stories of their experiences of disasters. The open ended questions that were asked are outlined in Table 3.2. In general, participants were able to talk at length on these topics, as their jobs required daily interaction with DRR, women or the intersecting issues. Though I had this general interview guide, being flexible in the interview process allowed for valuable tangents to be explored.

Prior to the fieldwork, I was granted approval by the ethics committee of the University of Auckland[5] which required the use of participant information sheets and consent forms. Before the interviews, the participants were given both forms. Participants indicated whether they wanted to be named in the study. For the sake of uniformity, all interviewees were later given pseudonyms, regardless of their preference to be named or not. The majority of my participants consented to be recorded and transcripts were written. While some researchers consider verbatim transcriptions unnecessary (see Stebbins, 2001), others consider them to accurately represent the participant, whilst ensuring minimal interference by the researcher (Gray, 2009; Hennink et al., 2010). I did not require any translation services which I was grateful for as utilising translation

[5] Approved by the University of Auckland Human Participants Ethics Committee on 9/10/2017 for three years. Reference number 019991.

service can slow down the overall study (Hennink et al., 2010). However, due to English being a second language for most of the participants, the transcripts are full of grammatical errors, and I was required to do some guesswork on the deeper meanings of some statements. Having been in Tonga for a significant period of time, I was able to understand the slang and the way that Tongan people speak English, so this was not a problem.

Theme	**Awareness and involvement in DRR projects and policies**	**Barriers or enablers to women's participation in DRR projects.**	**Understanding of cultural contextual gendered vulnerability**	**Experiences with disaster and hazards.**
Questions	1. What is your role in your organisation? 2. Can you describe how your organisation includes women in your projects or plans?	1. Do you think it is important that women are involved in DRR? Why? Why not? 2. Based on your experiences, what are the benefits or negatives of including women in DRR?	1. Are women vulnerable in Tonga? Why? Why not? 2. Are women vulnerable in disasters? Why? Why not?	1. Have you ever experienced a disaster? 2. Did your family do anything to prepare for a disaster, or recover afterwards? 3. Can you describe what was done, and who did it?

Table 3.2. Table outlining the interview questions. Source: Authors own, 2018.

3.4.2 Watching: Non-Participant Observation

I also employed the technique of non-participant observation in the study. Observation allows for a detailed description of behaviour, interactions, settings and events (Hennink et al., 2010). This is useful as people's actions are situated within the cultural context within which they are made (Bourque & Clark, 1992). Non-participant observation involves observing the activities taking place without taking part in them (Hennink et al., 2010). In Tonga, I had the chance to observe a community meeting in the district of Ha'apai. The meeting was run by the Tongan National Council of Churches (TNCC), as part of their '*Tokateu'* project (in English: 'Tonga Community Disaster Risk Management Project'). The community meeting was in Haateihosi'I, on the island of Foa in Ha'apai. This can be seen in Figure 3.3. This was the last of five meetings, where TNCC would run trainings for DRR, and help with the writing of a village emergency management plan. During this meeting I employed the techniques of non-participant observation, and as field notes are essential

Figure 3.3. A volunteer with the Tongan Red Cross demonstrating basic first aid at the community meeting in Haateihosi'i, Ha'apai. Source: Authors own, 2017.

for keeping track of the observations (Gray, 2009), I noted down the demographics of the participants, as well as the process of the meeting. This information can be seen in Table 3.3 Passive participant observation was chosen as the meeting was held in Tongan and did not require involvement from the audience. I did not include participant observation in other areas of my study as the scope of the research did not call for both in depth interviews with 30+ participants *and* a detailed description of daily activities.

Haateihosi'i community meeting as part of a TNCC initiative	**Males (Adult)**	**Females (Adult)**	**Children**
Participants	2	13	30+
Presenters	3 - 2 facilitators - 1 police officer	3 - 2 red cross - 1 NEMO officer	
Total	5	16	30+

Table 3.3. Table showing a breakdown of the participants at a community meeting in Haateihosi'i. Authors own, 2018.

3.4.3 Reading: Secondary Data Analysis

The secondary data took the form of Tongan policy documents, strategies, frameworks, field notes, and policy briefs about DRR or women. These documents can be seen in Table 3.4. The purpose of this type of data analysis is to provide an in-depth study of a document, perhaps applying a new perspective or focus (Gray, 2009). Initially, the documents which could be found online were collected. These included Tongan policies guiding DRR and gender mainstreaming. These policies were located on accessible databases such as Prevention Web (www.preventionweb.net), which is for DRR practitioners, and is run by the United National International Strategy for Disaster Reduction. Some documents were found by doing a google search for key words. Whilst in Tonga, I was able to collect new documents from participants that are not available

online. These included community development plans, gender mainstreaming toolkits and internal memos on policy making. Due to the a potentially large data set involving many different policies, I narrowed the focus to the Tongan plans, policies and frameworks for DRR and gender, and any documents from donors that pertained to this. These documents are laid out in Table 3.4. When analysing secondary data, Bryman and Bell, (2007) suggest that researchers should think of key questions when looking at the documents. Though I employed the technique of content analysis to formally examine the documents, I keep some key questions in mind. These are laid out in Table 3.5.

3.5 Analysing Language Through Content Analysis

Content analysis is a system of identifying and analysing the messages, themes and phrases that are present in a text (Cope, 2010; Gray, 2009; Neuendorf, 2002). Though it produces a quantitative analysis (counting the frequency within which key messages appear), it provides a valuable summary of the contents of qualitative data (Neuendorf, 2002). It can also be used to examine how a text is produced, who it is written for, and how it is circulated and used (Gray, 2009). Language has the power to not only reflect but also construct people's understandings of the world (Mansvelt & Berg, 2010). An analysis of the language that people use will therefore reveal their values and interpretations of their social world. As this methodology requires the production of a coding system for the text, it regulates the extent to which individual researchers can influence the analysis (Lee and Peterson, 1997). For the data set and the research approach, I felt it was most appropriate to employ the basic principles of content analysis as outlined by Neuendorf, (2002) and Gray (2009) with input from Cope (2010) on additional qualitative coding methodologies.

Category	Type	Document Name	Published	Written by
National Policy and policy add-ons	National Policy	Tonga Strategic Development Framework 2015-2024	2015	Ministry of Finance and National Planning
	National Policy	Revised National Policy on Gender and Development (RNPGAD) 2014 and RNPGAD Strategic Plan of Action 2014-2018	2014	Ministry of Internal Affairs
	National Policy	Tonga Climate Change Policy A Resilient Tonga by 2035	February, 2016	Department of Climate Change, Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications
	National Policy	Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management 2010-2015	July 2010	Government of Tonga
	National Toolkit	Risk Screening Toolkit: Mainstreaming risk into the national budget and corporate planning process for government and line ministries planners	October, 2017	Ministry of Finance and National Planning
	Local government policy	Community Participatory Planning Design	July 2015	Ministry of Internal Affairs, local government division
NGO and Donor agencies reports	Donor report	Pacific Risk Resilience Programme: Tonga Annual Report 2016/2017	2017	UNDP, Pacific Risk Resilience Programme
	Radio script	Women's Weather Watch radio campaign script	November, 2017	femLINKpacific
	Policy brief	Risk Governance; building blocks for resilient development in the Pacific	October, 2016	UNDP
	Report	Gender Profile Tonga	Unknown	Pacific Islands Forum Secretariat
	Report	Country Gender Profile: The Kingdom of Tonga	2010	JICA

Table 3.4. Table outlining the documents analysed in the study. Source: Authors own, 2018.

DATA SET	Questions
Policy – secondary data including policy, plans, and written documents	Adapted from Bryman & Bell, 2007; Gray, 2009. ▪ Who produced the document and why? ▪ Is the document produced by someone with authority on the subject? ▪ What everyday categories such as age, gender, and jobs are present in the text? ▪ Can the events and accounts presented in the document be backed up with other evidence? ▪ What are the labels that groups and individuals use to identify themselves, others and events? ▪ What patterns arise when the data is analysed?
Practice – primary data including interview transcripts, notes and observations	Adapted from Gray, 2009; Bryant & Charmaz, 2007. ▪ How do participants explicitly explain their actions and what are the unstated assumptions about these actions? ▪ What are the participant's motivations and intentions for these actions? ▪ What are the effects and of these actions on surrounding people and further actions? ▪ How has the researcher interpreted these acts before reporting on them? ▪ What is the context of the research and the world in which is it created? ▪ What impact does authority and representation have?

Table 3.5. Table outlining the questions asked during analysis. Source: Authors own, 2018.

3.5.1 Qualitative Coding

There are many techniques for qualitative coding, but for the scope of the research I have chosen to utilise three different types. Firstly, 'open coding', is a technique which involves the disaggregation of data into units, or themes (Gray, 2009). Using these previously established categories, the researcher can make connections between the context, and the interactions (Gray, 2009). Cope (2010) also suggests looking for

frequently used 'messages' or words which may have latent meaning (in the context of this research, the phrase 'violence against women' could have latent meaning of 'the status of women'). Lastly, the data can be analysed for in vivo codes; these being the expressions or metaphors that have meaning for the participants in relation to their cultural norms (Hennink et al., 2010).

Keeping in mind these recommendations, I developed the codes (words or phrases) after reading through a sample copy of the data, as recommended by Gray (2009) and Neuendorf, (2002). A list of words that were used in the coding is presented in the appendix. These codes were then organised into the three key areas for gender sensitive DRR as outlined in the conceptual framework, and the themes explored within each area. I also kept in mind the questions for data analysis that are presented in Table 3.5, to ensure that the research was grounded in theory. Reading through the interview transcripts and a select few policies, some clear patterns emerged, which will be discussed in depth in the remainder of the thesis.

3.6 Critical Reflections of a Pālangi in Tonga

The importance of critical self-reflection as a researcher is emphasised by many experts, especially feminist researchers (see England, 1994; Gray, 2009; Hennink et al., 2010; Kobayashi, 2001; Mansvelt & Berg, 2010). Reflexivity is the process of constantly scrutinising yourself as a researcher and the design of the research process (England, 1994). 'Critical reflection' in this sense can mean deep contemplation on the social consequences of the study that is undertaken (Kobayashi, 2001). As research is a dynamic process with new issues and ideas that constantly require attention, researchers should be consistently analysing their position, relationships, and their ethical practices

(Mansvelt & Berg, 2010). This is essential as power relations exist in all social interactions, so qualitative research is never free of the nuances of power and politics (Mansvelt & Berg, 2010; Smith, 2001). Through the stories that are told, the researcher has the power to change the way that their participants are perceived (Mansvelt & Berg, 2010). Power is also involved during the research process, especially during interviews. The researcher and their informants will often occupy different social positions, which may create an unbalanced relationship (Mansvelt & Berg, 2010). Allowing participants to lead interviews can alleviate this and be somewhat empowering (Skelton, 2001). It is also important to remember that you gather information only because your participants agree to give it to you (Skelton, 2001).

Undertaking cross cultural research may emphasise these power dynamics. Cross cultural research is that where the participants and researcher are of different nationalities or cultural backgrounds (Skelton, 2001). As we are products of our environments, the different cultural contexts that research participants come from will influence their responses (Skelton, 2001). For example, in a cross cultural context, whiteness may open or close doors (Moser, 2008; Skelton, 2001). Acknowledging power is especially important in research where there is a colonial legacy. Post-colonial and de-colonising research aims to utilise the research process as a tool to break down the discourses and power relations by which colonialism is maintained (Howitt & Stevens, 2010). Practitioners should seek local support and respect the legitimacy of people's knowledge (Howitt & Stevens, 2010). Feminist researchers in particular should reflect on how they influence practices of domination or oppression, and where they fit into the systems of inequality and privilege that are present in all societies (Haraway, 1998). By recognising existing power relations through the process of critical reflexivity,

researchers are able to adapt to challenges that may be faced in their fieldwork (England, 1994; Howitt & Stevens, 2010; Mansvelt & Berg, 2010).

3.6.1 Am I too white for this?

Part of this critical reflexivity process is address the positionality of yourself as a researcher. Many researchers note that a person's positionality has an impact on the outcome of fieldwork (England, 1994; Hennink et al., 2010; Moser, 2008). Positionality is how you present yourself to others, your age, sex, race, class; and how others respond to you based off of this (Gray, 2009; Hennink et al., 2010). The positionality of the researcher will influence how participants respond (Moser 2008; Skelton, 2001). In some cases, personal characteristics such as age and sex may improve the relationship between the researcher and researched, fostering mutual respect based on similar experiences (England, 1994; Mansvelt & Berg, 2010). However, they may also contribute to uneven power relations.

On reflecting on my own research, it is clear that conducting research as an 'outsider' offered both challenges and opportunities. I am a white New Zealander (in Tonga, a pālangi), I am middle class, and university educated. In Tonga, my pālangi status made it immediately clear that I was not a local, so I was perceived as an outsider. These factors ended up facilitating my research in several ways. Firstly, my position as a foreigner actually enabled my research in many situations. As I knew nothing about the Tongan contexts, I asked many questions, and my research participants went to great lengths to explain their countries laws and norms to me. My whiteness enabled deep, candid conversation about cultural norms, which may have been reserved had I been a local. Mansvelt and Berg (2010) corroborate my experience, and state that in some cases, being

an outsider can encourage participants to articulate feelings more clearly. Nevertheless, my position as an outsider means I will never fully understand the nuances and complexities of life as a Tongan woman.

A further factor of my positionality which could affect my research was my status as a university graduate undertaking research. This position could have led participants to be wary, restrict the information they shared, or not trust me. However, I experienced the opposite. Most of the interviews I conducted were with government officials, or the employees of NGOs. In these cases, I gained access to these groups through my status as a university researcher, which served as an ice breaker. Many of the participants had also done degrees and they had respect for my own studies. One interviewee had been to the same university and we discussed the people we both knew there. This factor did not (noticeably) affect my interviews with people who did not work in government or for NGOs. As my community member interviews were set up through a friend who was able to speak for my good character, the participants trusted me. Consequently, the fact that I was conducting research as a university student was not a hindrance.

Lastly, my position as a woman was the most powerful research tool. It granted me 'insider' access to many women-specific institutions, and allowed me to ask sensitive questions about the status of women in Tongan society. My position as a woman, regardless of my class or race, provided something for participants to connect with. As Mansvelt & Berg (2010) state, researchers are never either insiders or outsiders, but straddle many overlapping identities which can be utilised. On several occasions, participants discussed personal experiences of the hardships of being a woman in Tonga, their home lives and families. One told me about the power dynamic in her relationship with her husband. Despite the geographical and contextual setting, many experiences of

being a women are universal, and issues around violence, families, and patriarchal society are something we had all experienced. My position as a woman researching women allowed me to open up a space of sharing, without judgement. The literature on feminist research support this, and states that the nature of social life allows participants and researchers to have shared experiences and meanings attached to this (Rocheleau, 1995).

3.6.2 Friendship in the Friendly Islands

In conjunction with these positive experiences, one of the most important factors in my fieldwork was how I presented myself as a friendly person. While a researcher's age, race, or sex may be a door opener, her ability to connect with people and make participants feel at ease is often more important (Moser, 2008). Though I was a woman, discussing women's issues, I still had to ensure that my participants wanted to talk with me. I am already a very outgoing, friendly person, and I made a point in interviews to be casual, to allow for jokes, anecdotes and personal information to be shared.

Furthermore, I followed the feminist research technique of researcher-as-supplicant, whereby the researcher forms a reciprocal relationship based on mutual respect with the participant (England, 1994). During this process, the researcher explicitly acknowledges their lack of information, and there is an emphasis on knowledge sharing that may not be present in traditional interviews. As a foreigner, I relied on the participant's knowledge, as I genuinely knew nothing. In return, I offered to share the research outputs with the participants, most of whom were interested. Some feminist researchers argue that this sharing of information is a crucial part of the research process (England, 1994).

3.6.3 Limiting the Damage: The Ethics of Fieldwork

No matter how careful a researcher is, taking part in a study affects change on the lives of participants (Kobayashi, 2001). While doing cross cultural (and any other) research, there is a responsibility to respect and implement ethical protocols so that there is less harm done (Howitt & Stevens, 2010). As explained previously, the research was granted University of Auckland ethics approval. The process required a rigorous explanation of the ethical issues that may occur during the research, including concerns around voluntary participation, confidentiality, and data storage. This process is important as the right of the participants must be protected, and the researcher held accountable (Howitt & Stevens, 2010). Subsequently, when completing the fieldwork, I followed the four principles of ethics, as seen in Box 3.1.

Four Principles of Ethics

1. Avoid harm to participants;
2. Ensure informed consent of participants;
3. Respect the privacy of participants;
4. Avoid the use of deception

Box 3.1. The four principles of ethics in qualitative research. Source: Gray, 2009.

In particular, due to the personal, possibly sensitive nature of the research, it was crucial to reflect on the ethical considerations of even doing the study (Hennink et al., 2010). As my research was embedded in a cultural context I did not fully understand, prior to my fieldwork I consulted with several different agencies in Tonga, including NEMO and several NGOs aimed at ending violence against women and girls. In all instances, the agencies replied with interest in my work and ensured me that my interview questions were appropriate. As an outsider, I am aware that my worldview is different, so I consciously took extra care when living in Tonga to follow local cultural norms.

Furthermore, to reduce harm to participants, ensure their consent and respect their privacy, I used the participant information sheets and consent forms. These forms explained the research objectives, and informed participants of their rights while they were involved in the study. They also served as a tool to collect participants' personal details in order to share the research. Lastly, I avoided deceiving participants. As interviews promote trust, there is a responsibility by the researcher to maintain the commitments they make to the participants, and avoid acting deceitfully (Gray, 2009). Thus, I abided by the participants wishes; if they did not want to be recorded I did not record them, and so on. I was clear with regard to what the research would be used for. Using the forms and being transparent ensured that the participants and I understood each other.

3.6.4 Positionality and Power: The Limitations of Research as an Outsider

While I was able to engage with participants, one limitation on my research was the ethical dilemma of conducting qualitative research. Fieldwork is always confrontational, as it purposefully disrupts a participant's life, thereby introducing a power dynamic (England, 1994). Acknowledging this power dynamic in an ethics application does not remove it. Some authors question if true representation by an outsider is possible, given the deep cultural context of people's lives which cannot be easily explained (Kobayashi, 2001; Ley & Mountz, 2001; Skelton, 2001). Given this power dynamic and the complex identities that are present in the field, any claim of 'truth' in a study must be grounded in recognition of the limitations of the research (Mohammad, 2001).

Therefore, a limitation of my study was that it was difficult (and unethical?) to negotiate between the need for information from participants and my objective to be friendly,

culturally sensitive and respectful. Kobayashi (2001) states that there is a moral requirement to consider the research subject as more than participants in a study. However, though I shared personal stories with the participants, I found myself listening for a quote to put in this thesis. It seems as qualitative researchers, we cannot escape the position whereby the "lives, loves, and tragedies that fieldwork informants share with a researcher are ultimately data, grist for the ethnographic mill, a mill that has a truly grinding power" (Stacey 1988, p. 23). No matter how much of a relationship I had with a participant, I could not escape the fact that their words were my data. The type of qualitative, deeply personal research that was undertaken through my fieldwork and interview dense case study naturally put me in a position of power over my participants.

Furthermore, though it did not appear to affect my interviews negatively, my positon as a foreigner likely restricted the depth to which I could speak about this research. Due to my outsider status, I will never fully understand the context of Tonga. My experience as a woman is still very different from that of a Tongan woman, despite our shared fears or goals. There were many things said that I did not agree with. However, I cannot say who was 'right' and 'wrong' in this case, as my perspective is influence by my own social world. This may add to a bias that I will have in analysing and reporting on the data.

3.7 Conclusion

Undertaking qualitative research is more complicated than simply reading a document and transcribing an interview. As Stanley and Wise note, "whether we like it or not, researchers remain human beings complete with all the usual assembly of feelings, failings, and moods. And all of those things influence how we feel and understand what is going on" (1993, p. 157). Reflecting on the power dynamic between researcher and

participant, and the role of your own position in the world allows for researchers to more accurately represent their subjects. By employing the recommendations for feminist, interpretivist research, I designed a methodology which utilised the techniques of semi structured interviews, observation and secondary data analysis. As my data collection methods were highly personal and open to interpretation, I practiced critical reflection in order to examine my position in the research process. By developing the methodology in such a way, I was able to draw out key information from the participants in an ethical manner, thereby ensuring that the research was beneficial to all participants.

Chapter 4: Examining the Physical, Cultural and Political Context of Tonga

4.1 Introduction

The Kingdom of Tonga is an archipelago of 172 islands spread over 720,000km^2, in the Southern Pacific Ocean (refer to Figure 4.1 Travelling between the main island of Tongatapu (in the South) and the island of Niuatoputapu (in the North) takes 48 hours by boat (Ministry of Meteorology, Energy, Information, Disaster Management, Climate Change and Communications [MEIDECC], 2010). Due to its position on the boundary of several tectonic plates, the risk of cyclones, earthquakes or tsunamis is high. There are also multiple economic and social stressors which add to vulnerability of the country. Population change puts pressure on land and marine resources, and with greater migration towards the urban centres, people are forced to live in areas that are unsuitable for settlement (De Souza et al., 2015). There is also significant seasonal and long term migration out of Tonga for employment and education, and this social change can undermine traditional family oriented support systems (MEIDECC, 2010; Ministry of Finance and National Planning, 2015). As the economy relies on agricultural production, hazards such as cyclones, flooding and sea level rise pose a risk to many people's source of income. Climate change will exacerbate these hazards, which will further affect the ability to farm and collect food, thereby affecting Tongan people's livelihoods.

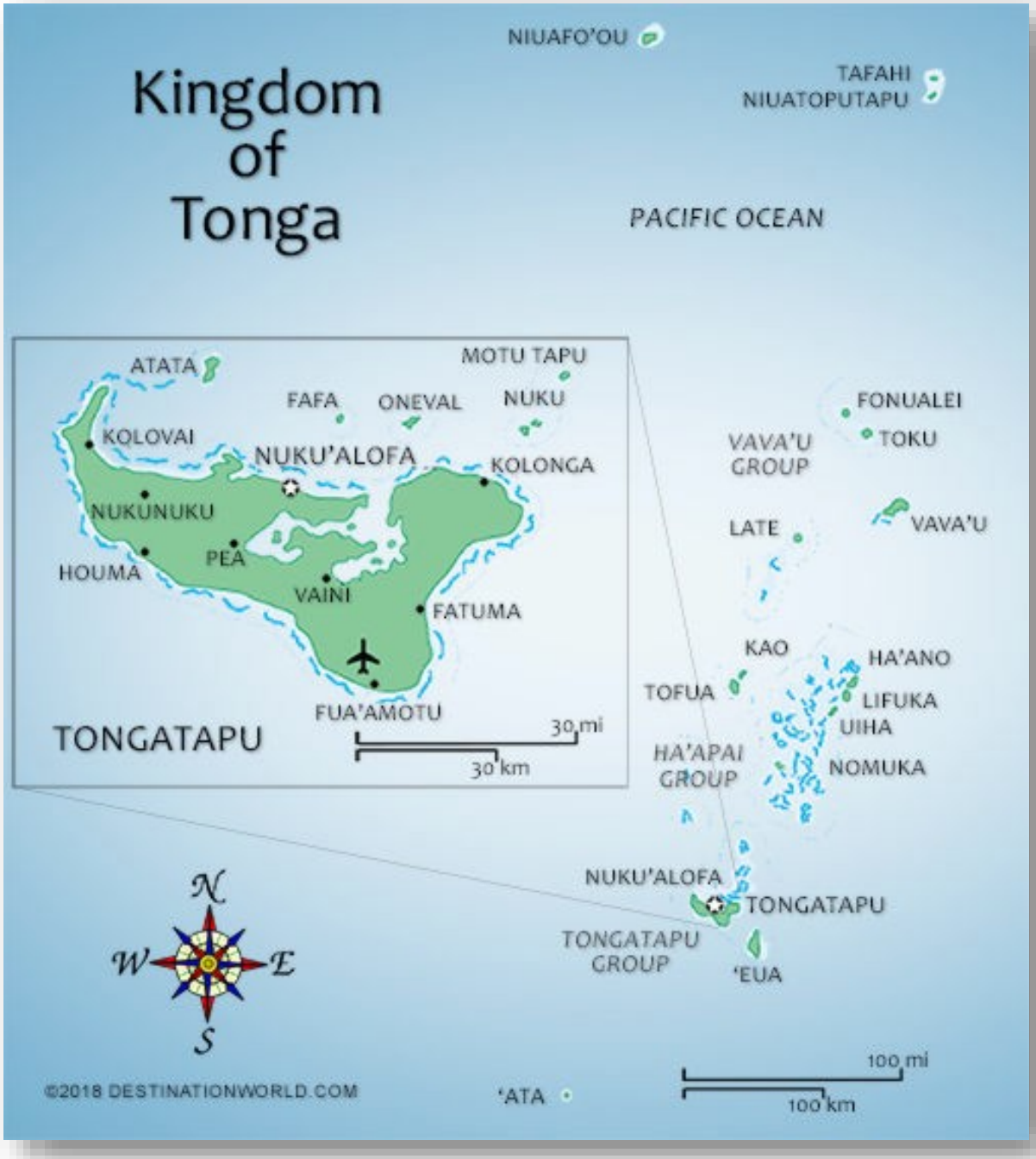

Figure 4.1. A map showing the geographical spread of the Kingdom of Tonga. Source: https://www.destinationworld.com, n.d.

Consequently, there is a certain risk involved with living in Tonga. This chapter outlines how Tongan people accept, mitigate and respond to these risks. It begins with a description of two major disaster events in the last 10 years which are frequently discussed by the public and act as a benchmarks for future disasters. I will then briefly

introduce the role of traditional cultural norms in Tongan society, and how they contribute to the unique and complex status of women. Next, I will outline the policies which inform DRR in Tonga, including the international and regional frameworks for both gender and DRR. Lastly, I will discuss the key stakeholders in Tonga that are responsible for DRR, and summarise their roles.

4.2 Experiences of Disaster: Tropical Cyclone Ian and the 2009 Niua's Tsunami

Every year, the country of Tonga prepares for cyclone season – the period between November and April where most tropical cyclones (TC) are expected to hit. On average, Tonga can expect to incur $15.5 million USD worth of damages per year from these events (Department of Climate Change, 2016). Recent disasters include TC Gita (12th of February 2018) which was recorded as the strongest cyclone to hit Tongatapu in 60 years, and the TC Keni (11th of April 2018) which damaged the Tongan island of Eua ("Tonga parliament building flattened by Cyclone Gita", 2018; "Tonga's 'Eua Without Power After Cyclone Keni", 2018). At the time of fieldwork, these cyclones had not occurred, and the most memorable disasters were the 2009 tsunami in the Niua's island group and the 2014 TC Ian in Ha'apai.

In the early morning of 29th of September, 2009, the northernmost islands of Tonga were hit by a tsunami which had a run up height of 22m (Fritz et al., 2011). The tsunami was caused by a rare occurrence of two earthquakes in swift succession – an 8.1 and 8.0 magnitude shake (Fritz et al., 2011). There was no tsunami warning in the affected islands but some locals heard the noise of the earthquake and knew a big wave would follow. 60% of the homes on Niuatoptapu were flattened, including the hospital and

airport runway, and 9 people lost their lives (Fritz, 2011). The inhabitants of the island were unable to contact the mainland for help, and used the radios onboard yachts anchored nearby to send a message to New Zealand (Interviewee 32). Media reporting on the impact in Tonga was sparse as there were significant losses and destruction in the neighbouring country of Samoa. This is the only time a tsunami has hit Tonga in recent memory.

TC Ian hit Ha'apai, 4 years later, on the 11th January 2014. At the time it was the most powerful cyclone to hit Tonga, and it brought gusts of 300km/hour (Magee, Verdon-Kidd, Kiem & Royle, 2016). It killed one person and injured dozens ("Tropical Cyclone Ian – Jan 2014", n.d). The eye of the cyclone passed directly over the Ha'apai island group, and one third of the population took shelter in formal and informal evacuation centres ("Tropical

Figure 4.2 Aerial view of damage to Foa and Foa wharf. Source: Tonga NEMO, 2014.

Cyclone Ian – Jan 2014", n.d). Damage to crops and the water supply were extensive with 99% of the banana plantations and 95% of all crops damaged (Magee et al., 2016). Additionally, 17 schools were damaged, just before the first school term was to start ("Tropical Cyclone Ian – Jan 2014", n.d.). Some of the damage to infrastructure can be seen in Figure 4.2. There was an immediate response from the government which

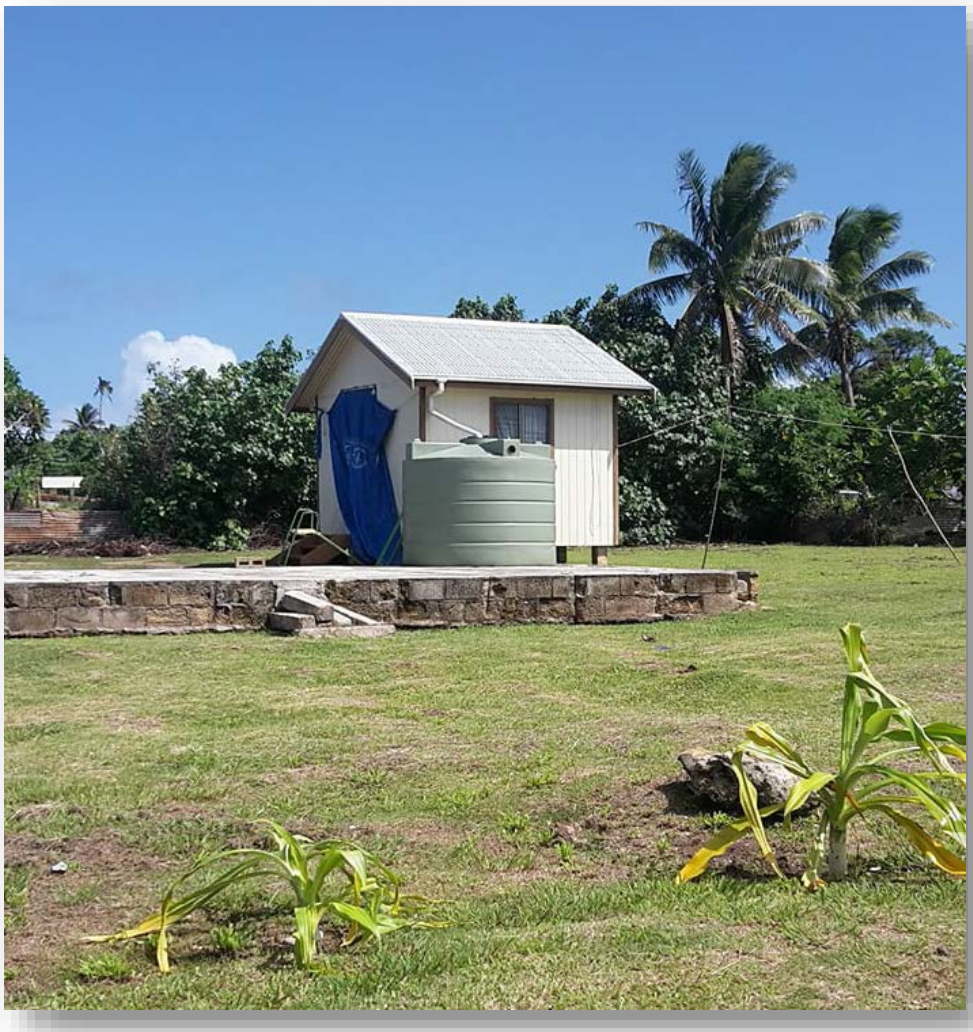

Figure 4.3. An example of the small houses built in Ha'apai in the reconstruction after TC Ian. Source: Authors own, 2017.

utilised bilateral financial aid, and humanitarian relief. Though the death toll of this cyclone was low, and cyclones can be considered 'normal' events in the Pacific, this disaster was very significant in terms of recovery and impact. Over the next four years,

there were setbacks in reconstruction, and some Ha'apai locals were unhappy with the assistance they were given. In particular, the houses that were rebuilt for people who had damage to their properties were extremely small and inappropriate for the large family sizes in Tonga (Interviewee 24, 30). An example of these houses can be seen in photo Figure 4.3.

The Ha'apai locals that took part in the research were open to sharing how they had prepared and what they had learnt from these disasters. The impact of these disasters on women (and men) was clear in the conversations with participants. A female participant cried while remembering her experience in TC Ian, while another said she was extremely scared at the time and didn't know what to do. One woman calmly shared her experience of the tsunami and how she helped people to safety and looked for bodies when no one else wanted to. A relative later confided that she had struggled to talk about the events until years later. The prominence of these disasters in the public discourse - despite there being nine notable cyclones in the last ten years, two of which were in 2016, - shows how cyclones and tsunamis are deemed to be 'normal', unless they exceed a certain standard.

Though TC Ian and the Niua's tsunami are considered severe and destructive events, throughout the stories of them there are themes of survival, capacity building and resilience. Firstly, these disasters provided an opportunity to build back better (a key priority of the international frameworks guiding DRR). Though there was significant damage to the infrastructure in Ha'apai after TC Ian, it highlighted the weaknesses of the existing structures, thereby providing an opportunity to make the remaining buildings more resilient to future events. During the cyclone, the Ha'apai hospital was very vulnerable due to its position on the beachfront and there was confusion in the days following about where people could get medical help (Interviewee 24; 7). Plans have now

been made to move the hospital to higher ground to reduce its vulnerability to storm surge or sea level rise (see Figure 4.4). Additionally, many water tanks were retrofitted

Figure 4.4. A billboard advertising the new placement of the hospital, on the high school rugby field which is one of the highest points on Lifuka Island, Ha'apai. Source: Authors own, 2017.

Figure 4.5. A community hall on Ha'apai that was retrofitted with water tanks following TC Ian. Source: Authors own, 2017.

to buildings that could act as evacuation centres (see Figure 4.5) This reduces the possibility of water shortages in times of large disasters, small emergencies, or during periods of drought.

People's experiences in these disasters also increased their knowledge about what to do in future events. Participants told me that they were more prepared for the possibility of a cyclone or tsunami, and several noted that they wouldn't underestimate them in the future. One woman said that after her experience in TC Ian where she was underprepared, she had learnt that "we should prepare every time" (Interviewee 28). Another man's past experience with cyclones allowed him to understand that TC Ian was going to be "a big hurricane", and consequently he prepared adequately for it (Interviewee 29). These statements were repeated in regards to the tsunami. A man shared that in 2009 he had gone to the beach in Tongatapu to watch the tsunami, but he certainly wouldn't attempt that if there was one today (Interviewee 25). Many people also noted that they took part in frequent tsunami alerts, and had prepared an emergency kit for cyclones, indicating that the public acceptance of the normality of these events does not translate to complacency in the face of disaster.

4.3 Culture as a Factor in Women's Vulnerability

In addition to the physical hazards associated with living in Tonga, there are several cultural factors which can contribute to a woman's vulnerability in disasters. Gender relations in Tongan society and culture are complex, deeply hierarchical, and have prevailed despite the introduction of Christian religion and the trappings of modernity. Tonga is a monarchy, and was never colonised. However, Europeans made contact between 1770 and 1810, and the Kingdom was a British protectorate between 1900 and

1970 (Campbell, 1992). Prior to European contact, Tongan women were not limited by the responsibilities of domesticity and were involved in political and economic activities, while men took part in 'female duties' such as childcare and cooking (Filihia, 2001; Herda, 1995; Ralston, 1990). Furthermore, the bloodline of the female was valued, and there were female leaders called *tu'i Tonga fefine* (Filihia, 2001; Rogers, 1977). As the sacredness of chiefs was inherited through women, their reproduction and sexuality was celebrated (Ralston, 1990). The gendered dichotomies present in Europe at the time were therefore not seen in the pre-industrial society of Tonga. However, with European contact came the introduction of Christianity and the related patriarchal systems (Japan International Cooperation Agency [JICA], 2010; Ralston, 1990).

The status of women in Tonga today is influenced both by the pre-industrial traditions and the views of the Church. Ranking is important, and within the social hierarchy, no two members of a *kainga* (extended family) share the same rank (Bott 1981; Kaeppler, 1971; James, 1983). In traditional Tongan society (and to an extent, modern society), women are considered more privileged and respected than men (Filihia, 2001). This is due to the institution of *fahu*, which can mean 'above the laws' or 'above the *tapu'*; where *tapu* is something that is special, sacred and should be protected (James, 1983, 1995). *Fahu* is a system through which high cultural value is given to the eldest sister of a family (James, 1983). This system grants a sister power over her brother's decisions and assets (Bleakley, 2002). This relationship is based on a traditional hierarchical relationship of *'eiki-tu'a*, where *'eiki* denotes a person with a higher social rank and *tu'a* is those with a lower rank (Filihia, 2001). There is great respect for those who are *'eiki* or *fahu*, as mistreating them could disrupt the *tapu*, and in Tonga, sisters are always *'eiki* to their brothers, as are older siblings to the younger siblings (Filihia, 2001).

The importance of *fahu* is reflected in both historical and current laws. The Constitution of Tonga was written in 1875, when the social system of *fahu* was widely practiced (James, 1995). As it was taken for granted that women would be provided for through *fahu*, women did not need legal rights to assets such as land, as their brothers would provide it. Consequently, the law was written to stipulate that only adult men are allowed to own land, which could then only be inherited through the male primogeniture (Bleakley, 2002). Widows may hold the land in trust, so long as they stay celibate and do not remarry (Bleakley, 2002). This law is still in effect, and there is reluctance to update it as it will result in the loss of the connection to ancient Tonga. However, in modern Tonga, the *fahu* system has been undermined by the introduction of Christianity, the transition to a cash economy, and the influence of globalisation (Bleakley, 2002). Women are now in a precarious and vulnerable position, as they have very few rights in the law but are also not as supported by the previously strong social system of *fahu*. The impact of this unique social system is that women are asset poor, which increases their vulnerability in times of disaster. Though there are many other factors of Tongan culture which can increase or reduce women's vulnerability, *fahu* is the backbone of many social practices which are seen today.

4.4 The State of Policy: Guiding Frameworks for DRR in Tonga

To assess the impact of disasters in Tonga it is also necessary to address the policies and frameworks which guide DRR. This is laid out in the following section, and Figure 4.6 provides an overview of all relevant policies.

Figure 4.6. A diagram showing the relevant policies at different scales which are mentioned in the thesis. Source: Authors own, 2018.

4.4.1 International and Regional Frameworks for DRR and Their Link to Gender

At the international level, DRR and CCA are guided by two frameworks. The SFDRR is the current international guiding framework for global DRR initiatives. The SFDRR is the outcome of the Third UN World Conference for Disaster Risk Reduction, and is a non-binding agreement which presents an interpretation of best practice DRR. It followed the Yokohama Strategy and Plan of Action for a Safer World, 2005–2015, and the Hyogo Framework for Action, 2005–2015. Its primary goal is to diminish disaster risk, resulting in less loss of life and livelihoods of countries and individuals (UNISDR, 2015). The SFDRR offers a guiding framework for DRR and a strategy for monitoring and reporting, and was signed by 187 countries including Tonga. For CCA (which, as explained earlier, is included as a subsection of DRR), the 2015 Paris Agreement is regarded as the first global consensus on mitigating and adapting to climate change. It was created by the United Nations Framework Convention on Climate Change and is the outcome of the 2015 Conference of the Parties (COP21). This framework aims to ensure that all nations are committed to climate change mitigation activities. In theory this agreement is legally binding, but the terms are flexible, as evidenced by the United States' recent revocation. (Roberts & Arellano, 2017). The Agreement provides universal benchmarks for mitigation activities which allows for review of each countries successes and failures. This institutional approach is necessary as dealing with the effects of climate change requires collaboration between governments.

There is some overlap between the two frameworks, though it is minimal. The SFDRR alludes to CCA and names climate change as a driver of risk. The Agreement also connects DRR and CCA and acknowledges the adoption of the SFDRR. However, DRR and CCA are mostly separated at the international level, which can result in fragmented policy making and poor implementation at local levels. Despite this international disconnection, the Pacific has integrated DRR and CCA into the Framework for Resilient Development in the Pacific, 2017-2030 (FRDP). Central to the FRDP are three key goals, which are seen in Box 4.1. The FRDP integrates the previous frameworks for DRR and CCA. These were the Pacific Disaster Risk Reduction and Disaster Management Framework for Action, authored by the Secretariat of the Pacific Community Geoscience Division (SOPAC); and the Pacific Islands Framework for Action on Climate Change, created by the Secretariat of the Pacific Regional Environmental Programme (SPREP). This structure required SPREP and SOPAC to compete for funding and subsequently diminished their individual power and influence. The FRDP offers more region-specific guidelines than the SFDRR, though it is also voluntary and non-binding, so its power may be limited.

KEY GOALS OF THE FRDP

1. Strengthened integrated adaptation and risk reduction to enhance resilience to climate change and disasters
2. Low carbon development, and
3. Strengthened disaster preparedness, response and recovery

Box 4.1. The key goals of the FRDP. Source: Pacific Community [SPC], 2017, p. 3.

Though these frameworks are specific to DRR and CCA, all mention women and gender. The SFDRR acknowledges that women's leadership in DRR will result in promotion of gender equality and a more accessible post disaster recovery and rehabilitation. At local and national levels, women's participation in DRR activities will empower women, and build their capacities. The COP21 document also states the importance of ensuring CCA

is participatory and gender sensitive. Furthermore, the committee which serves as the meeting of member parties (in relation to the Conference of the Parties) must be gender balanced, thereby ensuring that women are included at the highest level of decision making. Similarly, the FRDP recognises the importance of ensuring policies include gender considerations and encourage equal participation of men and women in all activities.

Outside of DRR and CCA frameworks, there have been recent attempts to mainstream gender equality at the Pacific and international levels. The Beijing Declaration and Platform for Action (1995) was the first international plan to advance women's rights, and was formed from the Action Plan created by the first Pacific Platform for Action (1994). More recently, the Revised Pacific Platform for Action on Gender Equality and Women's Human Rights (2018–2030) advocates to ensure the achievement and empowerment of women throughout the Pacific. Pacific leaders have also made a Gender Equality Declaration, adopted in 2012 and reaffirmed in 2015.

4.4.2 National Frameworks for DRR and Their Link to Gender

Tonga has many policies which are informed by these international recommendations and frameworks. Firstly, the Revised Tongan National Gender and Development Policy, 2014-2018 (RNPGAD) aims to ensure that both men and women are active in participating and contributing to the development of society, with the express goal of advancing gender equality. The policy notes that gender equality in Tonga is slowed by cultural beliefs of male superiority, the prevalence of gender based violence, and the unequal representation of women in employment and politics. It also explicitly mentions the vulnerability and capacities that women have with regard to disasters and climate

change, and notes that a gender perspective in DRR and CCA policies would better support families and communities. Some current DRR and CCA policies in Tonga recognise the value of this perspective.

One of these is the Tongan Strategic Development Framework, 2015-2025 (TSDF). The TSDF is the overarching strategy in Tonga which guides all development plans and policies, to ensure that long term development is resilient. The TSDF was produced following consultations with private, public and governmental stakeholders. During this process, stakeholders identified priority issues which were then considered when designing the framework. It is based on the motto 'God and Tonga are my inheritance' which stresses the importance of passing the country to the next generation, and emphasises the need to be sustainable. The TSDF acknowledges that Tonga has fallen behind on the third Millennium Development Goal of gender equality which is based on women's representation in parliament. However, the policy states that this is a poor measure of gender equality, as women in Tonga have a naturally high social standing (due to the aforementioned *fahu*). During consultations however, stakeholders identified gender equality as a priority issue. There was also an identified need for higher awareness of gender in programs and policies, and the introduction of sex disaggregated data. Consequently, gender equality is explicitly mentioned in one of the national outcomes of the TSDF, which states a goal for "a more inclusive, sustainable and empowering human development with gender equality" (Ministry of Finance and National Planning, 2015, p. 18).

Tonga's history with integrating DRR and CCA policies is the longest in the Pacific. In 2010, the first JNAP was created, which acknowledges the international, regional and national frameworks and agreements on DRR and CCA, whilst highlighting priority goals

for adaptation and mitigation of risk. The policy does not address gender, only mentioning that women's groups were included in the policy consultations. The JNAP expired in 2015 and JNAP II is due to be completed in 2018, and will include gender considerations.

In conjunction with the JNAP, Tonga has a current climate change policy (2016-2021). The purpose of this policy is to provide a clear vision to guide the response to climate change and associated disaster risk reduction. This policy recognises that uncertainty and risk are proponents of climate change, and it will be the biggest issue in the future. The climate change policy reflects the regional push towards integration of DRR and CCA as it links overall resilience to adaptation, mitigation and DRR. It therefore aligns with the goals of the TSDF. The climate change policy also emphasises gender inclusivity, equality and community ownership. It recognises that men and women have different environmental, economic and social experiences, and states that the planning and implementation processes for climate change mitigation activities will consider gender 'issues'. The policy further stresses the value of a participatory and inclusive approach to CCA, highlighting the importance of incorporating different people's experiences.

4.4.3 How DRR and Development Are Understood in Tonga

In Tonga, DRR is closely linked with sustainable development. There are many negative connotations for the word development, especially when advocating for it from a Western perspective. In the context of this thesis, development means the reduction of vulnerability through actions and initiatives which increase a community or individual's capacities and secure their livelihoods. Some examples include increasing the number of water tanks, building community halls or installing village loudspeakers. The aim is

resilience and self-reliance in everyday life, as well as disasters. Many projects which are labelled DRR or sustainable development can therefore be interchanged. Examples include the Community Development Plans which record a community's development needs in order to make them more resilient. This can easily be considered a DRR activity. NGOs who are not actively involved in resilience development can also be connected to sustainable development and DRR. Agencies such as the Talitha Project and Ma'a Fefine Mo e Famili (NGOs with a female empowerment focus) are included in consultations for DRR and development policies. This indicates that development (and by proxy, DRR) are key issues which all of society can contribute to. This may be due to the small size of the country, where many villages are exposed to natural hazards and are relatively isolated, (through there is relative heterogeneity between islands and districts), or simply reflect a cultural push to improve the living standards.

4.5 Stakeholders of DRR in Both Policy and Practice in Tonga

In Tongan policy, there are many key stakeholder groups who contribute to policies and are responsible for implementing the DRR policy. These include actors in the private and civil sector, government ministries, and youth and women's groups. Politicians and policy makers are the most influential actors in crafting national level policies and development objectives. Tongan parliament is made up a Legislative Assembly of 26 members, nine of which are nobles, which is a position only men can hold (Parliament of Tonga, 2014). The 17 other seats are voted by the people. The legislative assembly makes the laws and appoints the Prime Minister. The Prime Minister then chooses 12 Ministers to make up the Cabinet, the majority of which have to be elected into the Legislative Assembly (Parliament of Tonga, 2014). The Ministers are given a number of Ministries to oversee.

At the local level, there are also Town and District Officers, who are elected to be the government representatives for the villages and larger constituencies (Bott, 1981).

In Tonga, DRR is part of MEIDECC. The Ministry of Internal Affairs houses the Division of Women's Affairs. These Ministries are responsible for the creation of key policies such as the JNAP, climate change policy, and the RNPGAD. The TSDF was written by the Ministry of Finance and National Planning, with input from MEIDECC and the Ministry of Internal Affairs.

Non-governmental actors are often key in implementing DRR initiatives and actions at the community level. NGOs and donor agencies are good at this role, as they are able to work at different levels and bridge gaps between policy makers and community members (Djalante, 2012; Izumi & Shaw, 2012). They can also carry out projects which have a bottom up approach, as they work directly with communities (Djalante, 2012). NGOs therefore allow for dialogue between the national level policy makers and the communities who are affected by the policy. This is seen in the work of NGOs who have a DRR and sustainable development focus, such as Mainstreaming of Rural Development Innovation (MORDI) Tonga Trust or Tonga Community Development Trust (TCDT), or the Tongan Red Cross. Additionally, donor agencies like the UN or SPC can develop projects such as Building Safety and Resilience in the Pacific which connect communities' needs with and national level policy makers.

Another key stakeholder in DRR in Tonga are the cluster groups. Clusters are a UN developed system which proposes a universal structure to DRR, which coordinates the humanitarian activities of relevant agencies or government departments (Heath, 2014). The template for these is the same worldwide. These groups meet on a frequent basis,

and thus supposedly increase a countries preparedness for disaster. Each cluster has an agency lead, who ensure there is an adequate level of planning for disaster (Heath, 2014). These clusters are overseen and managed by the Office for the Coordination of Humanitarian Affairs (OCHA), a subsidiary of the UN Secretariat (Heath, 2014). There are several clusters in Tonga which are functioning and have been utilised in times of disaster, including the Water, Sanitation and Hygiene (WASH), Shelter, and Food Security clusters. Though clusters were established to provide clear leadership and accountability, the lead agency can wield its power over other stakeholders, and force their ideas on them (Heath, 2014). These clusters are also limited in power by their instruction to react only during or after disasters, and therefore they have very little impact on the pre-disaster context, where their help may be more useful. Additionally, they rely on the presence of NGO groups to transfer information from the communities, as there are no community leaders active in the clusters.

4.6 Conclusion

Tonga provides an interesting case study for researchers on disasters and gender. Due to the location of Tonga in the Pacific Ocean, events such as earthquakes or cyclones are not uncommon, and participants in the research shared their experiences with me frequently personal experiences of cyclones, tsunami and earthquakes were shared with me very frequently. These stories illuminate how disasters are seen as normal, until they exceed a certain limit, such as in the case of TC Ian and the 2009 tsunami. A brief look at social factors which can contribute to disasters also highlights the importance of *fahu* in Tongan society. To address the frequent disaster events, there are many different policies in Tonga which guide DRR and sustainable development. These are generally

informed by regional and national guidelines. Tonga is also proactively integrating gender related issues into DRR policies. Furthermore, there is significant engagement between non-governmental agencies and national policy makers, and in theory this facilitates dialogue between community members and politicians. In this sense, Tonga is well prepared for any hazard related phenomenon which should occur.

Chapter 5: An Analysis of Women's Participation in DRR in Tonga

5.1 Introduction

"We would have [included women] before, you know, even without regard to the DRR recognition and the call from the UN to be gender inclusive because women are marginalized. But even without it, I think we still would have done it" (Interviewee 20)

The following chapter will show that in Tonga, women lead the process of DRR planning and projects. However, despite women's engagement with DRR at the community level, they are not well represented in national policy. This section will explore the reasons why women are key participants in DRR, and how the current policy can hinder or facilitate their engagement. To do this, I will analyse the content of the interviews and policies as they relate to the key ideas of the conceptual framework. Firstly, I will examine the reasons why women's knowledge and experiences are included and prioritised in decision making for DRR, and the mechanisms which encourage this.

Type of Participant	***Number***
NGO – development	1-7
NGO - women's issues	8-11
Donor and support partners	12-16
Government ministry	17-25
Community members	26-32
Other	33
Type of document	***Number***
National policy or plan	1-6
Local government policy or plan	7
NGO report	8-9

Table 5.1. Table summarising the research participants and their organisations of employment. Source: Authors own, 2018.

Secondly, I will outline how a woman's social positioning as a caregiver influences her role in, and experience of DRR. Lastly, I will discuss how the cultural context of Tonga can restrict the inclusion of women in DRR actions at government and local levels. Table 5.1 summarises the participant types and their corresponding numbers.

5.2 Why Are Women Included in DRR?

"Everyone has to participate, including the women. Women have specific needs that are not common to men" (Interviewee 23)

Conceptual Framework Part 1: Integrating gender-specific knowledge into DRR policies and practices	**THEMES**		
	In Practice: Factors of Vulnerability for Women in Tonga	***In Practice: The Benefits of Including Women's Knowledge in DRR***	***In Practice: Information Sharing Through DRR as a Mechanism to Increase Women's Capacities***
Policy	The DRR policies in Tonga are out of date and do not reflect the recent push to incorporate gender, though development frameworks and policies which were written recently are more progressive.		
Practice	As a group, women are vulnerable for many different reason, including their access to land, the prevalence of violence and societal norms. To improve women's outlook in disasters, these factors should be acknowledged by governments and NGOs.	Women have different life experiences, needs and perspectives during disasters, and DRR policies and projects should capture this knowledge. Utilising women's experience and knowledge benefits the community and reduces the vulnerability of women in times of disaster.	Including women n DRR and development projects empowers women, and makes communities more self-reliant.

Figure 5.1. A summary of the findings as they fit into part one of the conceptual framework. Source: Authors own, 2018.

The entirety of the interview participants supported the notion that women should be involved in DRR in Tonga. The reasons given were: to collect the unique knowledge that women possess; increase their self-reliance; and reduce their vulnerability. These themes are summarised in Figure 5.1 However, the main policy currently guiding DRR in Tonga (the JNAP) does not recognise the unique experiences of women in disaster. More recent development frameworks and policies (such as the TSDF and RNPGAD) are more gender sensitive, and promote gender equality.

5.2.1 The Level of Integration of Women's Experiences and Knowledge in Policies

Overall, DRR policies and plans in Tonga lack any mention of gender as a factor in disasters or DRR. The Joint National Action Plan (JNAP) only defines vulnerability in terms of environmental factors. The extent of women's involvement in the JNAP is the acknowledgement that women's groups were consulted during the creation of the plan. NGOs whose work prioritises gender equality and female empowerment usually make up these groups. This consultation is detailed in the JNAP as the process through which the stakeholder groups identified vulnerable sectors and then prioritised them. These factors are hazard driven and the vulnerable sectors include coastal areas, fisheries, and so on. Though women (as a gender) were likely represented in these consultations, it is unclear what impact they had on the policy, as there is no mention of gender as a factor in vulnerability.

Some national policies, plans and frameworks *do* acknowledge gendered vulnerability and take steps to reduce it. This includes the TSDF, a goal of which is empowerment and inclusion of women (Ministry of Finance and National Planning, 2015, p. 17). The TSDF also recognises the role of women in furthering human development, particularly with

regard to economic, social and political prosperity. Additionally, the Climate Change Policy addresses the inequality between men and women and states that women's specific needs should be incorporated in "all planning and implementation processes" (Department of Climate Change, 2016, p.13, 14). The Gender and Risk Mainstreaming Toolkit which ensures that women and men access, participate in and benefit equally in future projects run by government ministries (Ministry of Finance and National Planning, 2017, p. 4). At the local level there is also acknowledgement of the importance of women as a key stakeholder group in the Community Development Plans. The agency which developed the Community Development Plans explicitly designed them to include women's knowledge and prioritise their concerns. Lastly, the Revised National Policy on Gender and Development (RNPGAD) declares that women and men should have equal participation in DRR and development.

Interestingly, all policies and plans written after 2014 are more gender inclusive than those written prior (see Figure 4.5 for a layout of policies). This could be due to a recent push for gender equality in Tonga through the lobbying of the relatively new Division of Women's Affairs at the Ministry of Internal Affairs. This Division have been responsible introducing gender into the Gender and Risk Mainstreaming Toolkit and the second JNAP. Several participants also noted that the efforts of this Division resulted in the creation of the Family Protection Act in 2013, and the inclusion of women and women's issues in the 2015 TSDF the 2016 Climate Change Policy. These policies were the first in Tonga to acknowledge women's value in DRR and wider development. Participants noted that the inclusion of women in these documents is the direct result of the influence of the Division, as previous drafts were not as gender sensitive (Interviewee 20; 22; 23). It is therefore clear that gender has become a priority issue in Tonga in the last five years.

Furthermore, an analysis of the timeline shows that prior to the Divisions' push for gender sensitivity in policies, NGOs and donor agencies in the DRR and development sphere were already actively including women. Many NGOs and donor agencies in Tonga, including MORDI Tonga Trust; Caritas Tonga; TCDT, and; TNCC ran projects which sought to reduce gendered vulnerability in the face of disasters and utilise women's knowledge and skills in DRR and related development. Regardless of the organisation, these projects all began prior to 2014. For example, work on the Community Development Plans by MORDI Tonga Trust began in 2011. Employees of organisations such as the Tongan Red Cross and TNCC also explicitly stated the importance of including women in DRR to reduce their vulnerability and collate their valuable perspectives and knowledge.

5.2.2 In Practice: Factors of Vulnerability for Women in Tonga

The state of allowance for gender in policies is very different to the reality of women's participation in DRR in Tonga. Overall, there was a clear consensus that gendered vulnerability exists in Tonga, and this affects women before and after a disaster. The reasons for this vulnerability include cultural, social and political factors. Firstly, there are high rates of gender based violence in Tonga. A 2012 national study on domestic violence against women in Tonga showed that 75% of Tongan women had experienced sexual or physical violence, and 91% of women had experienced controlling behaviour by their husband (Pacific Islands Forum Secretariat, n.d. p. 4). Around half of the participants agreed that this problem is exacerbated in times of disaster. Participants suggested that the high rate of violence against women is due to the strongly patriarchal and traditional culture which designates men as the head of the household and requires women to submit to their husbands and fathers (JICA, 2010). Until recently there was no national law which protected women if their husband was abusing them. In 2013, the

Family Protection Act was passed. It henceforth gave police support and legal rights to women and children who are abused by family members. However, in some cases, slow social change towards gender equality and the presence of these laws have been seen as the catalyst for violence. One participant stated that

> The rate for divorce, abusing of women is something that was really rare, and now it's become an issue because now we have women rights. Now we have everything's rights. Yeah and sometimes we feel that because women now get to have higher education and for example, married somebody who is just a farmer in the bush, he tends to feel, you know he's inferior to her. And then he tends to abuse that woman, just because they don't see eye to eye on a lot of things…Because when he's the breadwinner he feels that he's in power.
>
> (Interviewee 1)

These comments suggest that public opinion is slow to change and women are likely to feel the effects of these cultural norms for a while.

A further factor of gendered vulnerability is the inability for women to buy land in Tonga. Many participants discussed how this increased their dependency on other people, thereby increasing their vulnerability. One participant claimed that in some cases women had to return to an abusive relationship as there was nowhere else to live. The inability to own land also increases a woman's vulnerability in times of disaster when families are forced to relocate. During cyclone season, many households are headed by women as their husbands are overseas on seasonal work programmes (Interviewee 18). If there is a cyclone and the family needs to relocate post-event, the wife cannot purchase or rent land of her own, so will have to rely on male family members. This shows how the cultural norms which inform laws limit women's capacities in everyday life, and exacerbate their

vulnerability in times of disaster. The government recognises this land issue, and an employee for the Ministry of Internal Affairs stated that they were looking into solutions to this problem – though were not changing the laws which are the root cause of the problem. However, from the 1970s, the government allowed commoners to lease land, and the desire of women to have access to land is reflected in the fact that 70% of the leaseholders are women (Pacific Islands Forum Secretariat, n.d.). These statements from participants around cultural norms show that women face challenges which stem from their social setting and which add to their vulnerability to disasters.

5.2.3 In Practice: The Benefits of Including Women's Knowledge in DRR

The advantages of incorporating women's knowledge in DRR projects and plans was acknowledged by all participants. It was clear that as women and men experience disasters differently, both perspectives needed to be incorporated and included in disaster planning, preparation, response and recovery. This was summarised by one participant who said "women have specific needs that are not common to men" (Interviewee 23). This observation was echoed by government Ministries, NGOs, donor agencies and local people. There was also a consensus that female leaders should be utilised as a tool to engage with local community members. Some NGOs advocated for women's inclusion on this basis. The Talitha Project (an NGO advocating empowerment for young women) ran a public radio campaign in November 2017 which encouraged women's involvement in DRR. The campaign stated that

> It is essential that women are included in all disaster management processes, providing leadership in relief distributions, livelihood recovery and psychosocial support and management of evacuation centres, because disaster response must ensure the diverse needs of all are met.

Consequently, when women are included in decision-making and planning around disaster, their specific requirements are formally included in national planning. Participants also highlighted the link between including women in DRR and the consequential reduction in vulnerability. They stated that by excluding women in the planning process, there would be inappropriate and ill-informed decisions made in times of disaster. This is seen in the comments of one participant who remarked

> We found out that some of the issues during disaster, it was just like, it's only the men that we are taking care of. Some of the issues for women we didn't you know; we didn't have a fair idea of how they were coping with it … So that's why we kind of push for women and children to be involved.
>
> (Interviewee 16)

The consequence of excluding women in decision making is seen in several examples post-TC Ian. One Red Cross employee recounted cases of women struggling to get medical help following TC Ian in 2014. A government employee also noted that after TC Ian a shipment of food relief was sent to Ha'apai which was not appropriate for lactating mothers and young children. Though the participant did not comment on the reason for the decision to send that food, it is likely that the person in charge did not understand the needs of mothers and their children. However, several participants note that *only* including women's experiences and knowledge in DRR and development projects may also result in the dissemination of incorrect, one sided information. One participant recounted a story of a TCDT project which asked women about household income and expenditure. When TCDT returned to follow up, they spoke with the husbands as well and discovered that there were discrepancies between the information given by both people, suggesting that both male and female participation is required for successful DRR.

5.2.4 In Practice: Information Sharing Through DRR as a Mechanism to Increase Women's Capacities

It is clear that the participants considered women's knowledge to be valuable asset for DRR in Tonga. They also discussed the opportunity for DRR projects to empower women and increase their self-reliance through skill sharing and information transfers. A sustainable development project run by TCDT had this goal, and an employee said

> The idea behind [the gardening plot] is that we wanted the women to work together … as a group, they sell this, they use the money there to start something we call a credit union … So that's the idea, its building self-sufficiency for women. Self-reliance.
>
> (Interviewee 2)

In disasters, Tongan women also took part in activities which would increase their self-sufficiency. To prepare for a cyclone, women wrap up their mats to protect them from possible water damage. This ensures that the family has a source of income (through the sale of the mats) if the men can't harvest or sell crops after the cyclone (Interviewee 1). Building self-reliance for women through DRR projects and policies is particularly relevant in the context of Tonga, where there are high rates of gender based violence (JICA, 2010; Pacific Islands Forum Secretariat, n.d. p. 4). An employee of the Women and Children's Crisis centre noted that women's vulnerability as a consequence of this violence could be reduced when women became more independence and self-sufficient. By encouraging women to participate in trainings and skill-improvement courses, she said "[women] can be able to cater for their needs and especially with their kids when

their husbands leave them" (Interviewee 10). Though self-reliance is not an explicit goal of DRR, in Tonga it is a valuable objective as it will reduce a woman's overall vulnerability.

5.3 What Are Women's Roles and Responsibilities in DRR?

"Women are expected to take charge" (Interviewee 13)

Conceptual Framework Part 2: Supporting women as key stakeholders in DRR	**THEMES**		
	In Practice: The Impact of Family Roles and Responsibilities	***In Practice: Women's Participation in Community Initiatives for DRR***	***In Practice: The Societal Limitations on Women's Participation in DRR***
Policy	The lack of representation in politics restricts women's access to resources. At the local level, women are expected to take charge, and DRR policies should take advantage of this.		
Practice	Women's roles and relationships in their families can inhibit or foster women's engagement with DRR. In particular, their role is as caregivers and nurturers may render them more vulnerable in disasters, but can also encourage women to take the lead in household DRR.	Women are extremely active in community level DRR, which is reinforced by the social norms around gender roles. A key mechanism of support for their contribution is through community committees.	Women in Tonga are well respected in DRR at the local level but this is not reflected in the wider social level. Social norms around women's roles can restrict women's ability to be leaders, and this restricts women's engagement with DRR.

Figure 5.2. A summary of the findings as they fit into part two of the conceptual framework. Source: Authors own, 2018.

Whilst acknowledging the value of women as stakeholders in DRR, participants also recognised that a women's roles or relationships could impact their participation in DRR. In particular, women's engagement with politics, their family dynamics and their social position may hinder or facilitate their participation. In order to fully support women in DRR, practitioners and policy makers should take these factors into account when planning projects. Many DRR and development policies in Tonga are explicit in their intention to ensure female participation, and acknowledge how these factors may impact their contribution. These themes are summarised in Figure 5.2.

5.3.1 The Extent of the Inclusion of Women as Stakeholder in DRR in Policies

Some policies also acknowledge the influence of social and political factors on women's participation in DRR. A main barrier to women's engagement is their lack of political representation. The lack of representation is compounded by women's low level of participation in the formal labour force when compared with men. Though there are a significant number of female CEOs, there are few women in managerial positions, and women tend to work in informal sectors such as handicrafts (Ministry of Internal Affairs, 2014). These concerns are acknowledged by both the TSDF and the RNPGAD, and both policies state the intention to increase women's political representation and opportunities for leadership in the workplace. The RNPGAD and TSDF also recognise the role of the family in women's development and engagement with DRR. The TSDF notes that family is the "basis and most important unit in society" (Ministry of Finance and National Planning, 2014, p. 10), and is key factor in social and economic development. The RNPGAD acknowledges that the gender equality and female empowerment begins at the family level. Both policies also state that the family is a key source of encouragement

and support for women. The JNAP does not acknowledge any of these factors or their influence on gender-inclusive DRR.

5.3.2 In Practice: The Impact of Family Roles and Responsibilities

Many participants discussed how a woman's roles and responsibilities within her family could influence her contribution to DRR. They noted how the family dynamic and relationships could support women's participation in reducing the risk of disaster. An employee for TCDT, an NGO focussed on capacity building among disadvantaged groups, summarised this as "if you develop women alone, away from family, you put her in a hard place. If she is alone it is not working" (Interviewee 2). Participants were also clear that the family dynamic assists in capacity building around DRR. Women are forced to participate in DRR activities due to the gender roles and responsibilities in their families. In Tonga, women are primarily mothers and caregivers, and are responsible for household duties. DRR is considered an extension of these duties, and several participants noted that women are better at DRR than men due to their caregiving responsibilities and "childbearing mentality" (Interviewee 19). One participant also claimed that women suited to DRR as a consequence of this mentality. She stated

> [Women] are the most resilient being. More resilient than male. It's so different talking to the women because they're so resilient, they're so strong, they have no time for aftershock. They just, okay there's kids to be fed and all that stuff. And the men they just sit there, and they're taking in, you know it takes a long time to get over [disasters].
>
> (Interviewee 11)

However, a woman's role within the family may also increase her vulnerability in disasters and limit her ability to participate fully in DRR. Several participants mentioned the burden of being a mother and caregiver in times of disaster. One participant recounted a story of the 2009 Niua's tsunami, where a woman was conflicted about whether to save her young son or her grandmother. Due to her uncertainty about who she was most responsible for, she delayed her escape, and was caught in the wave with her son. Her grandmother unfortunately died. Her indecision and responsibility for both people directly resulted in the unnecessary injury of herself and her son. Additionally, many female participants discussed the struggle of being a working mother. One participant told of her husband's anger after she left her family during the Niua's tsunami to help other people to safety. Another discussed how she struggled with her husband who thought she should stay at home with her kids, despite her role coordinating the Tongan Red Cross response during TC Ian. She said "sometimes our husband is our struggle. The first person to throw a rock to us" (Interviewee 7). It is clear that her dual role as a mother and an employee was difficult to negotiate, and her story shows that though women are expected to prepare for disasters as part of their household duties, there are restrictions on their ability to contribute more formally to DRR.

5.3.3 In Practice: Women's Participation in Community Initiatives for DRR

The positions and relationships that women have in the community were also cited by participants as being a factor in limiting or encouraging women's involvement in DRR. A multitude of participants stated that women are the most active stakeholders at the community level. Women were considered to be more active than any other group before, during and after disasters. One participant stated

> I think [women] are more active than men in terms of preparing for disaster, no? Because man sometimes they too comfortable, they are laid back in getting ready. I think some women groups, especially the church, they, some church group, they very active in preparing for these things … if I have to rate the man's participation or willingness … women they are in front by a bit far.
>
> (Interviewee 25)

The discrepancy between men and women's actions in the community in disasters was also explained by a survivor of the tsunami, who described being one of three women organising the body recovery and clean up after the disaster. She said that the male police and town officers hid in the mountain as they were scared. Another participant noted that after TC Ian, women were the first to help their neighbours and ask for seeds to assist in their recovery.

There are several reasons for women's impressive engagement with DRR at the community level. Firstly, there are many opportunities for women to participate due to their position on community committees. In each village in Tonga there is a women's committee, which is responsible for making handicrafts to sell to earn money, and a Village Emergency Management Committee (VEMC). VEMCs create a Village Emergency Management Plan, which outlines their actions in an emergency, and which is practiced during community drills. The VEMC also oversees small development projects. In order to ensure that women are well represented in DRR at the community level, the VEMCs must be made up of 50% women. Being part of committees is common practice among Tongan women, and half the community members interviewed were in key positions in the women's committee or the VEMC. Furthermore, an employee of Caritas (an NGO focussed on human development) noted that whenever community leaders were invited

to meetings, approximately 85% were women. This gendered skew was also visible in the turnout for the community meeting in Haateihosi'i, where more than 75% of the adult attendees were women. Community committees therefore offer an opportunity for women to become key stakeholders in DRR and development

Secondly, women are key stakeholders in local level DRR for the same reason they are key stakeholders in household DRR – socially enforced gender roles support it. As one participant stated "[the wives] have all the capacities, you know, the experience, working with people. The most active kind of groups in the communities are the women's ones" (Interviewee 3). A participant acknowledged these gender roles by stating that "women are the backbone of Tongan society. Men go and they work, but it's the women who remain at home" (Interviewee 17). Another participant claimed that they had learnt that community development was influenced heavily by suggestions made to the town officers' wife. Furthermore, a participant noted that in times of stress men would retire and drink kava (a traditional Tongan alcohol drunk only by men), leaving their wives to deal with the problems. These comments suggest that Tongan women's involvement in DRR in the community is a consequence of the heavily segregated gender roles in their society. It is there clear that women have a key role in communities, and this role enables them to be key stakeholders in DRR.

5.3.4 In Practice: The Societal Limitations on Women's Participation in DRR

Despite anecdotal evidence that women are the most active group in DRR in Tonga, the social and political setting can limit their ability to contribute as stakeholders. A major factor is a lack of female representation in parliament. Out of the 17 people's representatives in parliament only two are women, voted in in the November 2017

election (though one has since been fired as a result of fraud charges). The low representation of women can be attributed to the fundamental set up of the Tongan parliament, where there are less seat available for women politicians due to the seat reserved for nobles. This low number of women in parliament can also be attributed to the widely held social belief that women are not suitable as leaders, and should remain in the home (RNPGAD, 2014). This is echoed in the comments from a participant who discussed her experience campaigning for a past election. She said

> I remember going to the villages and the women would come and say 'you know, I came to your meeting just to come and tell you to go back home, and do your husbands laundry'. There's still those women!
>
> (Interviewee 9).

Another interviewee noted that in her experience, women did not vote for female politicians as they thought this would imply that the women running for government were superior. This suggests that recent social movements to promote women's leadership do not have widespread support.

A further factor which limits women's participation in DRR is the existing social system of *fahu*. As discussed previously, *fahu* describes the (waning) traditional system whereby women are culturally respected and have a higher social status than their brothers (Filihia, 2001). Discrimination against women in politics and laws is therefore acceptable as women are theoretically able to utilise their brother's resources, including land (Bleakley, 2002). Several participants cited *fahu* in their explanation of the social positioning. One participant said

> In the Tongan culture, women are already higher than men ... They are to be respected. They are to be … Revered. Treated almost like princesses. There's a saying in Tongan '*oku ke pilinisesi pe 'i ho 'api',* 'you're a princess in your home'. That's the thing that told to all men.
>
> (Interviewee 6)

However, through conversation with participants and analysis of the gender and development policies, it is clear that though there are system which encourage social admiration of women, they are also somewhat disrespected. One participant noted this and described women's social status as 'blurred'. He said "they will say that in Tonga they put the women first but according to the laws, like the land laws, they don't have any rights" (Interviewee 25). This is seen in Tonga's failure to ratify the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). CEDAW calls for countries to ensure the equality of women in law, and to eliminate and protect women against discrimination (UN WOMEN, n.d.). Tonga is one of only seven countries who have not ratified this Convention. One reason CEDAW is unratified is that it required women to be treated equally in law. In order to achieve this, Tonga would have to change the Constitution which prevents women from owning land, and states that royal and noble succession is through the male primogeniture (Pacific Islands Forum Secretariat, n.d.). These laws are justified by *fahu*, as through this system women access and control their brother's land. *Fahu* can then be used to obscure the key issues of women's development and empowerment in modern Tonga.

It also became clear that there was strong public backlash to ratifying CEDAW. This backlash took the form of large scale protests organised by conservative church leaders to reject CEDAW as it would legalise abortion and same sex marriage (Interviewee 11,

12). This response shows how women's issues are accepted in the wider public. One participant confirmed this and stated that the public was against it because

> It's about women. and they think its women's issues. And I don't know why they hate women's issues so much … you know we have been doing this advocating for a number of issues. Like pushing for women's seats in parliament. And now were pushing CEDAW and now were pushing that one and now were pushing – so they all look at us like oh my gosh those crazy women you know? … So when we come, when we come and promote CEDAW and all that stuff they say oh my gosh it's those women again ... Some of them said we want to take over the country, some of them said we are witches.
>
> (Interviewee 11)

This response reflects the sentiments from participants about the strict roles of men and women in society. Women's engagement with DRR at a society level can therefore be impeded by the gendered norms. However, some participants were confident that the social norms and segregated gender roles were slowly changing for the better. One said

> I would say that traditionally for us women, we are, we are more looking after everything inside the house ... But now that more women are actually going out and have better educations and are involved in working, and become breadwinners at home. Women are getting into parliament.
>
> (Interviewee 9)

This suggests that women may soon become key stakeholders in DRR at the national level, as well as the community and family levels.

5.4 What is the State of Gender Inclusive Policies and Practices?

We've got women on response committee, We've got women on response teams, We've got women in management, We've got women in the development committee.

(Interviewee 24)

The final step for gender-inclusive DRR as outlined in the conceptual framework is the suggestion to integrate women-centred initiatives into existing and future DRR policies and practices. There are currently many non-governmental agencies who are actively including women in their DRR projects. For this to be successful, practitioners and policy makers should have an understanding of the context within which they are working. In Tonga, there are many unique cultural factors which can impede or assist in the design and implementation of gender-inclusive DRR, including the role of religion in shaping

Conceptual Framework Part 3: Integrating gender concerns into DRR actions and initiatives	**THEMES**	
	In Practice: The Importance of NGO and Community Initiatives for DRR	***In Practice: The Role of Context in Impeding or Encouraging DRR Actions***
Policy	Some policies acknowledge the role that cultural factors such as religion can be utilised for DRR. However, they also recognise the potential for these factors to enhance actions for DRR.	
Practice	There are many community level and NGO-driven DRR projects which actively include women's voices. Lessons about the importance of explicitly including women in policies can be learnt from these initiatives.	In Tonga, religion reinforces gender roles which restrict women's power and freedom. Religion is therefore an important factor to take into account and utilise when organising DRR projects.

Figure 5.3. A summary of the findings as they fit into part three of the conceptual framework. Source: Authors own, 2018.

societal norms. Though many NGOs acknowledge the importance of context in their work, and their projects reflect this, only the more recent policies address this. These ideas are summarised in Figure 5.3.

5.4.1 Change Over Time Towards a More Gender Sensitive Government

Unsurprisingly, policies written before 2014 do not recognise the importance of the cultural context in affecting women's interaction with DRR in policy or practice. The JNAP does not discuss gendered vulnerabilities and the contextual factors which contribute to them. However, recent policies such as the TSDF and RNPGAD are more detailed. The TSDF includes an extensive section on the nuances of Tongan culture, and it states that progress towards MDG 3 (promotion of gender equality) in Tonga is slow, and the Constitution could be updated (though it is unclear what this would entail). It also recognises that the Christian and traditional values which underpin Tongan life can be very restrictive. The Climate Change Policy has less detail on the contextual factors, but aligns itself with the outcomes of the TSDF, thus indicating that they share similar goals. Lastly, the RNPGAD acknowledge how the context of Tonga can hinder attempts to be more gender inclusive. The policy states that through the experience of proposing and then rejecting ratification of CEDAW, it shows that there is "a widespread misunderstanding of gender equality and, to some extent, denial of the existence of gender inequalities in our society" (Ministry of Internal Affairs, 2014, p. 6). Curiously, though the RNPGAD and TSDF recognise that women's traditional high status (through *fahu*) is not reflected in national laws, they respect the authority of the Constitution and do not propose any changes to the law.

Analysis of the policies also shows that actions to include women in DRR and wider development has increased over time. Though the JNAP has no mention of gender-inclusive initiatives, the Gender and Risk Mainstreaming Toolkit, TSDF and climate change policy are more comprehensive. The toolkit is especially relevant as it ties gender to disaster and climate risks, thereby encouraging planners to ensure all plans and projects have addressed any gender concerns. The Climate Change Policy also explicitly states its goal for all actions addressing climate change to be "multi-faceted, cross-sectoral, gender inclusive, equitable, and with a strong emphasis on community ownership" (Department of Climate Change, 2016, p. 7).

This recent integration of women's issues into policies is somewhat affected by donor agencies requirements to receive funding. One participant noted, "I think UNDP was one of the major funders and in JNAP II they told them to put [gender] in specifically. Otherwise they would pull their funding" (Interviewee 6). Government agencies frequently collaborate with NGOs and donor agencies to create gender inclusive initiatives, as demonstrated by the cases of the Gender and Risk Mainstreaming Toolkit (developed by the Pacific Risk Resilience Programme in conjunction with the Ministry of Finance and National Planning), and the Community Development Plans (designed by MORDI Tonga Trust in conjunction with the Ministry of Internal Affairs). Though this indicates a willingness from the government to work with NGOs on progressive, gender inclusive projects, this may reduce the accountability that the government has if a project goes wrong. Alternately, it could mean that NGOs were being driven by government priorities, and therefore their goals may not align with the community's interests. One participant mentioned a development project which was done by a large donor agency which wasn't in line with the local people's expectations, and was a waste of money, but

was allowed to continue as it looked good for the government. Therefore, though collaboration is often successful, it may come at the expense of one group.

5.4.2 In Practice: The Importance of NGO and Community Initiatives for DRR

In practice, many NGOs and donor agencies working in Tonga have acknowledged the importance of including women's voices in DRR and wider development and designed their projects accordingly. There are many examples of this occurring, from TCDT's longstanding '*Amatakiloa'* project (seen in Figure 5.4), to the planning for gender segregated evacuation centres by the Pacific Risk Resilience Programme, and the advocacy for female leaders in DRR by the Talitha Project. Some government agencies are also proactive in promoting gender inclusive DRR, as seen in the work of the Climate Change and Disaster Risk Manager for Ha'apai and the priorities of the Ministry of Internal Affairs. One of the more successful instances of gender-inclusive DRR is the push by TNCC and the National Emergency Management Office (NEMO) to include women VEMCs. One participant was part of her village's VEMC and she described her committee's project to light rural roads at night to make them safer for young women. It is therefore clear that when women have a formal, defined role in planning community projects, they are able to directly influence. Another example of a gender-inclusive DRR initiative are the Community Development Plans, developed by MORDI Tonga Trust. The Community Development Plans were purposefully designed to prioritise women's needs (over those of men or youth) in terms of key areas for community development. The logic behind this was explained by the Director of MORDI Tonga Trust who said

> I think for us we need to … we can't take care of the whole structure. So we strengthen the women committee. And make them run well and then the others can follow suit. Because [women] attend meetings, they respond to

requests and also they initiate. They innovate. They find ways of getting money to do things, and you know, finding people to do work. But my point there is that, get [women] strengthened, and then… the men's group can follow suit.

(Interviewee 5)

Figure 5.4. A photo showing a recipient of sandalwood tree seedlings, given by TCDT through the Amatakiloa project. Source: Authors own, 2017.

He further explained that these processes had to be in place to ensure women were being included in policies and practices around DRR. He said "because at the end of the day, if you don't have [those processes], forget about highlighting women" (Interviewee 5). Another participant also noted that without policies, the good work that happened on the ground would "fall through a couple of months later" (Interviewee 24). This suggests that actions which are gender inclusive must be backed up by policies to be most effective.

5.4.3 In Practice: The Role of Context in Impeding or Encouraging DRR Actions

The majority of participants in the research revealed how the cultural context impacted how women engaged with DRR. This has been discussed in depth throughout this chapter, as all factors which hinder or support women's involvement in DRR (including the role of women as caregivers, the low female participation in politics, or the expectation that women are very active in community development) are culturally contextual. However, the best example of the relevance of the cultural context is the power of religion in Tonga. One participant stated that there were no atheists in Tonga, because even if you didn't believe in God, you pretended to. Church leaders are therefore extremely influential in Tonga and they can use their platform to endorse and advocate for social issues. In regards to DRR, this was seen through the establishment of the 72-hour disaster preparedness bag by the LDS Church. This is a bag with supplies to enable a family to survive for 72 hours, and the LDS leaders used their weekly sermon to remind their congregation to prepare one. This initiative was so successful amongst the congregation that it was launched as an official tool for DRR by NEMO. LDS chapels are also recognised by the government as official cyclone shelters, and people utilise them in times of emergency. Thus, the power and influence of the churches in Tonga could be an asset to policy makers and practitioners aiming to promote a certain agenda.

However, in the context of Tonga, religion can also challenge social change, particularly with regards to DRR and women's equality. One participant had noticed that Tongan people who believed in God were less likely to be proactive in a disaster. Another participant summarised this attitude as "there are two options for disasters: believe in God or believe in MEIDECC" (Interviewee 12). Religious beliefs can also be used to justify negative gender roles which encumber women's involvement in social activities. One participant used religion to justify the church-affirmed domination of men over women, by saying

> Eve was made from Adam's rib bone. In Tonga ... there's a saying that the home is the home of the mother, or the female. But the head of the family is the father. Because women were made from us, [they're] part of us.
>
> (Interviewee 3)

These examples show how religion strongly influences the actions and beliefs of the general public. It is therefore essential that policy makers, and DRR practitioners acknowledge the context within which they work, and how this may impact their goals.

5.5 Conclusion

Through careful analysis of the content of 33 interviews and the many national policies guiding DRR, development and social development, it is clear that Tongan women's contribution to DRR is encouraged and actively sought. Women in Tonga have many specific and well-defined roles and responsibilities in their everyday life, which lend themselves to being a more motivated group in DRR projects. Though the current DRR policies and plans lack any nuanced acknowledgement of the value of women in DRR,

there are many recent policies in the development sphere which promote gender-inclusive practices. In addition, many NGOs and donor agencies prioritise women's experiences and knowledge in their DRR and wider development projects, and consequently there is a strong female presence in DRR at the community level.

Chapter 6: A New Understanding of Best Practice for DRR – Lessons From Tonga

6.1 Introduction

This chapter provides a detailed analysis of the factors which facilitate and hinder women's participation in DRR in Tonga. Though the literature on disasters assumes that gender inclusive policies are a prerequisite for women's participation in DRR, this study suggests that the reality of women's involvement is more complex. As detailed in the previous chapter, women are key stakeholders in DRR at the local level in Tonga but are largely invisible at the national level policy. The Tongan case study therefore simultaneously corroborates and disproves the conclusions made in the literature. The following chapter will outline the contributing factors to women's participation in DRR in Tonga, with a close examination of how the cultural context can assist or impede this.

Firstly, I will draw from the literature on global studies of DRR and compare this with the experiences of Tongan women. Though Tonga has many similarities with studies from different areas of the world, it is also unique in that the strong connection to traditions and the emphasis on family values in Tonga society are key factors in shaping women's lives and experiences. A summary of these key themes can be found in Figure 6.1. Next, I will assess how the cultural context of Tonga can both be a tool and a barrier for women's involvement in DRR. Though there are many factors which outwardly appear to increase Tongan women's vulnerability (and most undoubtedly do), a close analysis of this setting shows that women are able to transform these into opportunities for capacity building.

Lastly, I will discuss the implications of this case study for the 'best practices' for DRR as proposed by the literature. In particular, I will suggest that these are often Eurocentric and are not always appropriate in non-Western contexts.

6.2 Is Tonga Unique? A Comparison Between the Literature and the Case Study of Tonga

6.2.1 Women's Involvement in DRR Reduces Their Vulnerability: Do Tongan Policies Recognise This?

Throughout this study, it has become clear that Tongan women as a group face many challenges which make them vulnerable. These include discriminatory laws which restrict women's access to land; cultural norms which reinforce men's power over women; and high rates of gender-based violence which serve to diminish and dull women's potential. As a country, Tonga has significant gender inequality in its laws and can be classified as a patriarchal society (Bleakley, 2002). These social, structural and political issues are acknowledged by all stakeholders - policy makers, development NGOs, community leaders and laypeople - as contributing to Tongan women's vulnerability. An analysis of Tonga's development and DRR policy shows that there has recently been some progress towards including women's issues in national policies, but it is not widespread. Thus, there are clear parallels between the factors of vulnerability for women in Tonga and those presented in the literature. Though there are no studies on Tongan women in disasters, the same conditions which make women vulnerable are in place.

Scale		Part 1: Integrating gender-specific knowledge into DRR policies and practices	Part 2: Supporting women as key stakeholders in DRR	Part 3: Integrating gender concerns into DRR actions and initiatives
Policy	Literature	Policies should be gender inclusive and utilise women's knowledge - Ariyabandu, 2009; Fordham, 1998; Dankelman, 2002; Valdés 2009; Fothergill, 1998	Policies should acknowledge the different roles of women - Fordham, 2004; Sultana, 2014; Cornwall, 2003; Mehta, 2007; Enarson et al., 2007	Including women will improve the impact of policies, but the context is also relevant - Enarson & Morrow, 1998b; Fothergill & Peek, 2004; Fothergill 1996; Bradshaw 2001; Le Masson, 2013; Veena & Kusakabe, 2015
	Tonga	The JNAP does not recognise the value of women's knowledge or contribution. Other policies do.	Most DRR policies do not recognise the social factors which impact women's participation in DRR. Some development policies do.	Newer policies acknowledge the role of culture in impacting women, but the main DRR policy does not.
Practice	Literature	Including women in DRR will reduce their vulnerability, increase their self-reliance, and enhance DRR at all levels - Mehta, 2007; Enarson, 1998; Morrow & Phillips, 2008; Enarson & Morrow, 1998a; Kumar, 2002	Women are constrained by certain societal norms, and are therefore key stakeholders in DRR - Fordham, 2011; Fothergill, 1998; 1999; Sultana; Bradshaw & Fordham, 2015; Cannon 2002	NGOs are a key mechanism for connecting local and national levels and may be very useful in DRR - Izumi & Shaw, 2012; Shaw, 2003; Djalante, 2012
	Tonga	Women are included in DRR to reduce their vulnerability and increase their resilience.	The roles and responsibilities of Tongan women can facilitate or hinder their engagement with DRR activities.	There are many NGO led initiatives for DRR that are gender sensitive

Figure 6.1. A summary of the literature and findings as they fit into the conceptual framework.

Source: Authors own, 2018.

However, Tonga is different from the cases presented in the literature for two reasons. Firstly, the history of Tonga has a huge impact on forming the societal expectations for men and women. As Tonga was never colonised, the traditional hierarchical social structures which were present hundreds of years ago (which include the presence of royalty and nobles) have remained unchanged (Campbell, 1992; James, 1983). These traditional structures were very patriarchal, though there were systems in place to counter the effects on women; for example, *fahu* and *tu'i Tonga fefine (*Filihia, 2001). With European contact (in a non-colonising context) came Christianity, and thus the introduction of further hierarchical and patriarchal values (Ralston, 1990). Due to a lack of oppressive colonial rule, throughout the years Tonga has sustained its traditional culture and associated values, though much of it is now incongruent in a modern setting (Filihia, 2001; James, 1983; 1995). This largely unspoiled connection to history provides an interesting back drop for a study on women's vulnerability.

Secondly, the case study of Tonga is unique in that there is a push to involve women in DRR and development projects despite a lack of momentum in the current DRR policy. The main DRR policy in Tonga is the JNAP (published in 2010), which has little to no recognition of gender considerations. Furthermore, it is out of date and overdue for renewal. Policies which were written in the last four years have more recognition of women's issues and experiences (see the TSDF, Climate Change Policy, and RNGPAD). This shift to producing more gender sensitive policies can be attributed to the lobbying of the Division of Women's Affairs, or the push by donor partners for gender inclusive policies. It could also be attributed to the recent establishment of international and regional frameworks for DRR (such as the SFDRR and FRDP). Additionally, development guidelines and frameworks such as the SDGs advocate for the gender equality and female

empowerment. However, at the time that the JNAP was produced, similar (albeit different) frameworks for gender inclusive DRR existed, which should have influenced policy-making. Prior to the creation of the JNAP, Tonga was a signatory of the Hyogo Framework for Action, which recommended the creation of gender sensitive policies (UNISDR, 2005). Additionally, Tonga had committed to the Millennium Development Goals which advocated for women's equality. The lack of gender in the JNAP thus suggests that there is (or was) a reluctance to formally recognise women's issues in policies.

Despite this, at the time of fieldwork, there was a strong consensus amongst the relevant stakeholders in DRR, development and among women's rights groups that women are vulnerable, and this vulnerability can be reduced by including women in DRR. By getting involved in DRR projects and programmes, Tongan women can gain financial independence, actively plan their family's futures and lead their community's development. This rationale for participation is also seen in the literature which states that the consequence of excluding women's voices in DRR is that policies and practices will be ineffective, one-sided and contribute to vulnerability rather than reduce it (Dankelman, 2002; Fothergill, 1998; Morrow & Phillips, 2008). Thus, including women in DRR reduces vulnerability and improves policies and practices by increasing the knowledge, skills and experience which are available to practitioners and policy makers (Enarson, 1998; Mehta, 2007).

The inconsistencies between policy and practice with regard to including women in DRR suggest that the JNAP does not reflect the popular opinions of practitioners and the general public. This indicates that policies have less influence on practices than previously assumed. It could also attest to the power of the Division of Women's Affairs, which has been commended by many stakeholders for ensuring that gender is included

in new policies and guiding frameworks (for example, the JNAP II and the Gender and Risk Mainstreaming Toolkit). This internal push, as well as the public recognition of women's value in DRR has led to many recent changes being made to include women in formal policies.

6.2.2 Discrepancies in the Female Experience: How Cultural Norms Inform DRR Practices at Different Scales

The case study of Tonga is also unique as though there are a range of societal and structural factors that undoubtedly contribute to their vulnerability, Tongan women are able to manipulate and utilise them to their favour. This is clear when analysing the different scales at which women either engage with or are prohibited from participating in DRR. In general, Tongan women are the most active and well respected group in the community in terms of participation and management of DRR initiatives. As explained previously, the input of Tongan women is valued by NGOs and development agencies who work at the community level, and they are often purposefully targeted by these organisations. Although there is a clear objective to include Tongan women in decision making, planning and the outcomes of DRR, these actions can be constrained or encouraged by family, community or societal factors.

The contributing factors to women's participation in DRR at the family level include the importance of the mother's responsibilities in the family and the strict gender roles which define a woman's position. In Tonga, the value of the family as the core unit within society originated with the traditional concept of *kainga*, as there was no word for family as it is defined in English (Kaeppler, 1971; Ministry of Internal Affairs, 2014). *Kainga* are anyone who you can trace a biological link to, so tend to encompass large groups of people who

can feasibly call each other relations (Kaeppler, 1971). In traditional societies, the transferal of assets and cultural prestige was dependent on the family line, and the importance of family in modern society is reflected in the wording of the current TSDF and RNPGAD policies. This valuing of the family has withstood the transition into a more globalised Tongan society, in part due to the introduction of Christianity which tends to emphasise conservative family values (Bleakley, 2002). In present day Tonga, women take on the role of mother and caregiver, which is deemed important as it holds the family together. The role of women as mothers and caregivers has been examined in depth in the literature which links women's caregiving role to their increased vulnerability. Women who care for many people are often less able to prioritise their own needs in times of disaster (Fothergill, 1999, Morrow & Phillips, 2008; Sultana, 2014).

This is visible in the case of Tonga. As large families are the norm (supported by the aforementioned social values and the presence of conservative religions), and women often care for the elderly, women are often responsible for a large number of people. This increases the burden on them, both in regular life and in times of disaster. Furthermore, if a woman is divorced or widowed she has less help with these tasks. However, the case study shows that the strict gendered roles in families can also facilitate women's engagement with DRR. Participants noted that the role of planning and preparing for emergencies or disasters was considered a domestic task that the mothers would complete. Therefore, capacity building and female participation in DRR is an unintentional positive of a role which otherwise negatively affects a woman's vulnerability. Though the roles of mothers, and their responsibilities in disasters has been examined in the literature, there is little acknowledgement of the positives of this role.

The case of Tonga is also interesting as women are routinely cited as being the most active, engaged, resourceful and organised in community DRR. The work of women in communities is well established in the literature, which states that they often have key leadership roles and develop strong relationships with their neighbours, which could be utilised in times of disaster (Enarson, 1998; Enarson et al., 2007; Enarson & Morrow, 1998b). In Tonga, women's activity in this sphere is facilitated primarily by the social norms which designate mothers as heads of DRR in their households, but is further influenced by the existence of community committees which are explicitly gender inclusive. Examples are the VEMCs and the women's committees. These committees are supported by donor partners, NGOs and government departments, so there is capacity building for the women involved, prior to any disaster event.

Though there are positive actions being made at the local level, many national policies and practices can hinder women's development in general. These include the lack of female political representation, restrictive cultural norms (which reinforce the lack of women in politics), and the failure to ratify CEDAW. There is also extreme backlash to changes being made to discriminatory laws (which can be misogynistic and patriarchal), as they are seen as 'traditional'. This suggests that though Tongan women have managed to transform the negative aspects of their socially constructed roles into positives at the community level, they are limited at wider society levels. The impact of traditions and cultural norms on women's ability to participate in DRR in general is well documented in the literature (Arora-Jonsson, 2011; Enarson, 2000; Fothergill, 1996; Sultana, 2014; Tyler & Fairbrother, 2013). Therefore, though the cultural context of Tonga is unique, many of the factors that impact women's participation in DRR are visible in other societies.

6.2.3 Key Stakeholders and their Impact on DRR in Tonga

Overall, the experiences of Tongan women in DRR presents an interesting, somewhat illogical case. The lacklustre policy and the various reasons for gendered vulnerability suggest that Tongan women are likely excluded from all DRR processes, and are not valued as legitimate stakeholders. This is seen frequently in the literature on disasters, and in studies of gender roles in disasters which show that post-disaster, women are assigned 'female tasks', which include caregiving and homemaking (Enarson & Fordham, 2001; Hines, 2007;). However, though gender has recently been included in formal policies in Tonga, this research shows that women have been involved in informal DRR for much longer. In Tonga, women *are* active in the DRR sphere – though it is generally in the community only. Furthermore, this involvement can often be informal. Beyond the inclusion of select women in the VEMC, there are few opportunities for women to hold formal leadership positions within the community. As the participants stated, men are almost always the official Local and District Officers. Women's power in the community therefore often arises from her position as the wife of an important man, or through an NGO led development project.

Consequently, NGOs tend to be extremely important in Tonga to foster female participation in DRR and wider development projects. Many of these projects also provide a link between the community and local or national governments. The value of NGOs in DRR is well observed in the literature (see Djalante, 2012; Izumi & Shaw, 2012; Shaw, 2003;). In Tonga, NGOs such as MORDI Tonga Trust, Caritas, TCDT and TNCC have initiatives which put women at the forefront of their DRR projects. Some examples include the creation of the Community Development Plans by MORDI Tonga Trust, the *Tokateu* project run by TNCC and the *Amatakiloa* project from TCDT. Of note is the

process that was used to create the Community Development Plans, which prioritised women's development needs over any other group in the community. This action was justified by the head of MORDI Tonga Trust as he had seen first-hand following TC Ian that women were the most affected by the disaster. Furthermore, he claimed that if they didn't have overt instructions to include women, they would be likely unintentionally excluded due to the cultural norms which encourage women to defer to men. He suggested that to properly involve women in DRR, they needed to be explicitly accounted for in the guiding documents for the project. This statement mirrors the ideas in the literature that regardless of the success of action at the community level, policies are necessary to back up those actions (Gaillard & Mercer, 2013; Izumi & Shaw, 2012).

As evidenced by the distinctive and heavily contextual case of Tonga, the cultural context can be a major factor of the success or failure of DRR projects. Though there is an extensive literature on women in DRR around the world - which surprisingly produce similar conclusions - none have quite the same cultural, social and political circumstances as Tonga, and therefore none have the same outcome. Some of the cultural factors which make Tonga unique and consequently impact the outcome of DRR have been touched on in the previous section. However, one of the major factors in Tonga which is in line with much of the literature is the role of religion in fostering or preventing women's participation in DRR.

The role of the church and religious leaders can be an obstacle or an aid to the inclusion of women in DRR (Bolin & Bolton, 1986; Gaillard & Texier, 2010;; Gillard & Paton, 1999). Religion is a large part of Tongan life, so churches can have considerable influence over their constituent's actions. Religious beliefs can foster an understanding that disasters are 'acts of God', which can trigger feelings of helplessness, or alternately, may contribute

to more robust pre-disaster planning (Gillard & Patton, 1999). Both are visible in the case of Tonga. The former was seen in the comments of several participants who said they would pray in the case of a tsunami, because any attempt at escape was futile. This was the same advice offered to me after a small earthquake during my fieldwork. The latter is exemplified by the LDS churches which have several initiatives which encourage families to prepare for disaster. This includes *Family Home Storage* which is the recommendation to stockpile food, water and money to prepare for future adversity. (The LDS Church, 2007). They also introduced the 72-hour bag; a portable kit for emergencies, which has since become part of official NEMO advice. LDS chapels are also used in Tonga as evacuation shelters in case of cyclones, as they are some of the most structurally sound buildings in the country. DRR practitioners could therefore utilise the resources and networks that religious organisations possess to serve their communities (McGeehan & Baker, 2017).

6.3 The Paradox: How Tongan Culture Both Facilitates and Hinders Women's Participation in DRR

After analysing the interviews with policy makers, community members, practitioners and NGOs on the status of women in DRR, and examining the relevant policies, two things become clear. Firstly, the cultural context is the most important factor in hindering or facilitating women's participation in DRR– not the state of policies. A breakdown of the relevant cultural factors is presented in Figure 6.2. Though gender has been incorporated into several policies in Tonga, many of the gender-inclusive projects at community levels commenced prior to this. This implies that policies have less impact on the participation into several policies in Tonga, many of the gender-inclusive projects at community levels

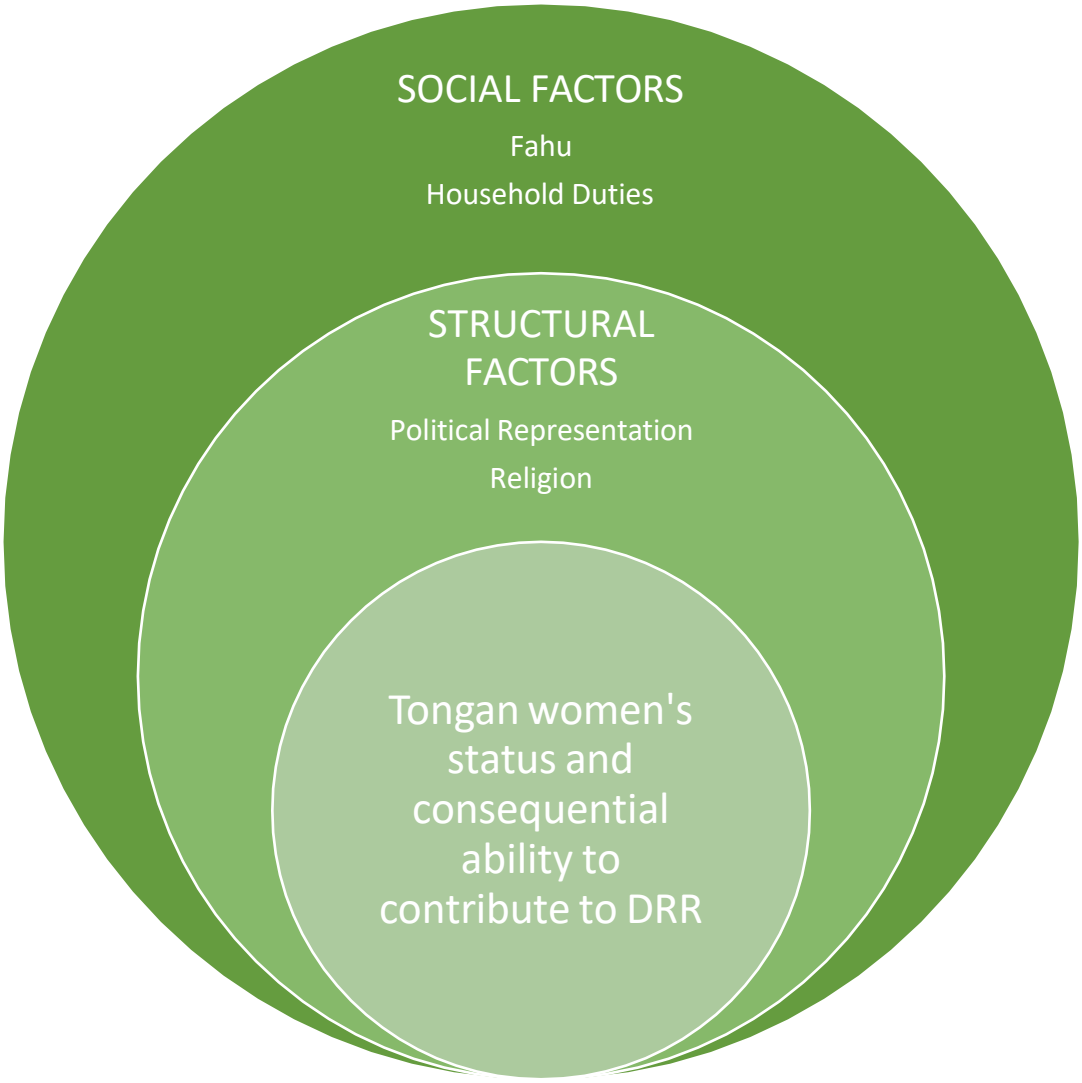

Figure 6.2. A diagram showing the factors of Tongan culture which impact DRR. Source: Authors own, 2018.

commenced prior to this. This implies that policies have less impact on the participation of women in community DRR than the literature (and I) previously assumed. Secondly, women in Tonga primarily engage with DRR at the local level, and they are often prevented from participating at the regional or national scale due to the same culture factors which are described in Figure 6.2.

Tonga is a highly hierarchical and patriarchal society, where women's roles and responsibilities are culturally mandated and socially enforced (Bott, 1981; James, 1995; Kaeppler, 1971). Women can be constrained (or buoyed) by social expectations to prioritise motherhood over a career, an attitude which is intensified by conservative religious views (Interviewee 7; Bleakley, 2002; Pacific Islands Forum Secretariat). Women are also not encouraged to hold positions of leadership in their communities or society at large, as this is considered a masculine role (Interviewee 8, 9; Ministry of Internal Affairs, 2014). Though women are said to be highly respected in Tongan culture, and their input into community DRR projects is valued, there are very few women at the parliamentary level who can influence policies, suggesting that women are still limited by social norms around gender roles. Furthermore, there is little public recognition of issues which impact women such as gender inequality in politics (Interviewee 12). Though the existence of gender roles which disadvantage women is not unique to Tonga, the cultural setting and associated values are. To fully study the influence of DRR policies, it is necessary to ascertain the influence of the cultural context, and how this can result in the marginalisation or empowerment of women.

6.3.1 Cultural Traditions and Patriarchy: Key Factors Which Impact the Experiences of Women in Tonga

When examining how the context can impact women's engagement with DRR, it is necessary to look first at the wider social factors that influence how women are perceived. These are seen in the stories of Tongan women who struggle to reconcile being mothers and having a career; in those who fought against the role of domestic housewife by running for parliament, and; in those who suffered following TC Ian due to inequitable

land laws. However, many of the root causes of these experiences – that being the patriarchal culture, the traditional and conservative social norms and the presence of *fahu* in Tongan society - may also facilitate women's participation and engagement with DRR.

One of the most important social factors in Tonga is *fahu*. The influence of this social system was obvious in all interactions with the research participants. A full exploration of the nuances of *fahu* is beyond the scope of this research, and also likely beyond the reach of myself as a foreigner. The following analysis is therefore shaped by what I gleaned during my brief stay in Tonga, and the sparse literature on *fahu*. As explained previously, *fahu* is the traditional social system by which women have significant cultural value - though this value does not necessarily translate into real power (Filihia, 2001; James, 1983; 1995). Specifically, *fahu* teaches men to revere and respect women (to some extent). Though some aspects of *fahu* are no longer as influential in modern society (such as the power of a sister over a brother's decisions), it still has a role in shaping how women are perceived and treated (Bleakley, 2002).

However, *fahu* also makes women vulnerable as they do not have the same rights as men and it can be used to justify the marginalization of women in law (Bleakley, 2002). Any inequalities in society can be repudiated by the existence of *fahu*, as it is assumed to naturally propel women to high levels of respect and authority. The inequities in national laws are therefore not acknowledged or addressed. Furthermore, the diminishing role of *fahu* in 21st century Tonga is not accounted for in national laws which have not changed since the Constitution was written in 1875 (when *fahu* had a larger influence) (Bleakley, 2002; Gailey, 1996). As women have less rights than men, and gender issues are not well

understood in wider society, prioritising women's involvement in projects generally depends on the NGO or donor group acknowledging their value.

Women are further disadvantaged by the strong patriarchal views that exist in Tongan society. These views manifest in the beliefs that women are 'naturally' suited to being mothers and working in the home, while men are suited to being leaders - in families, religious groups, and society at large. Several participants noted that their careers were affected by their husbands' expectations them to prioritise childcare. The role of women as primary caregivers also influences the decisions and actions that women are able to make in disaster situations. It was clear from the research participants that regardless of the impact of a disaster, a woman would support her family and community both emotionally and financially, whereas men could take more time to recover mentally before returning to a daily routine. This was seen in Ha'apai after TC Ian, where women were more active than men in the recovery efforts (Interviewee 7). This phenomenon is identified by several researchers, who also note that during a disaster, a women's role in the community or family increases (Enarson & Morrow, 1998; Enarson & Fordham, 2001; Hines, 2007; Mehta 2007). This intensification of the female caregiving role post disaster is visible in many different societies, regardless of wealth or gender.

Women's vulnerability in these situations will also be exacerbated if there are existing social norms (for example those perpetuated by systems of patriarchy) of men being the dominant decision makers in the home and society (Enarson, 2000). There is evidence that in societies which are heavily patriarchal, men make the decision in the household, and women may be unable to make decision about evacuation in the event of a disaster (Ariyabandu, 2009; Chakrabarti & Ajinder, 1994). As Tonga can be described as a country

with overtly patriarchal norms (based off the interview testimonies, the unequal laws, and status of women in society), this may also be the case.

On the other hand, the socially constructed gender roles in Tonga may also facilitate female engagement with DRR. Women are required to engage with and lead in terms of familial and community DRR as it is considered part of their domestic duties. This position enables women to be key stakeholders in informal discussion and actions for DRR. Furthermore, the caregiving, family-oriented role of Tongan women can also become an opportunity for capacity building. It is well established in Tongan society that children respect and obey their parents, and this can be an asset to women in times of disaster. Many participants noted that men, women and children had clearly defined roles in disaster, thereby limiting the confusion and ensuring the workload was split. Women with many children may be more vulnerable as they have more responsibilities, but as the children age they offer more assistance. Additionally, as some NGOs noted, including all family members in female-oriented development programmes increased the sustainability and longevity of the project.

Therefore, factors which restrict women's freedoms and contribute to vulnerability can also empower women in unexpected ways. For example, though *fahu* has detrimental consequences for gender equality in national laws, and its power could be considered to be lessened in modern society, women in Tonga still tend to be revered, appreciated and obeyed in ways that are unusual for such an overtly patriarchal society. As women are already respected in society, when they do get involved in DRR, their contribution is valued. This is seen in local level DRR in Tonga, through projects organised by NGOs such as TNCC, MORDI Tonga Trust and the Tongan Red Cross. The literature generally describes the negative aspects of the socially constructed roles and responsibilities for

women and does not address the opportunities for it to encourage and assist participation in DRR.

This research therefore suggests that despite the possibility for social systems of *fahu* and patriarchy to construct and maintain restrictive gender norms in Tonga, these norms can encourage and enable women to become leaders in DRR in their families and communities. The statement, "women get things done" is therefore a self-fulfilling prophecy. Cultural norms dictate that women are more suited than men to engage with family and community initiatives for DRR and development. As they are more active in the community, they are targeted by NGOs and donor agencies, who then extoll their virtues as participants in their projects. This creates a culture whereby women are active in the community because the norms and expectations of society promote and maintain it. The case study of Tonga thus suggests that the high rate of women's involvement in DRR is due to existing social and cultural norms, which can also be factors of women's vulnerability.

6.3.2 Religion and Politics: The Role of Wider Social Structures in Shaping Tongan Life

Within the Tongan context there are also structural factors which can marginalise or empower women and therefore impact their engagement with DRR. These include the lack of female political representation and the strong presence of religion in Tongan culture. These structural factors cannot be separated from the social systems and associated cultural norms, as the latter will influence and contribute to the effect of the former (Gaillard & Texier, 2010).

Firstly, the role of the church in Tonga can restrict the opportunities for female leadership and reinforce negative social norms. An overwhelming majority of Tongans consider themselves religious, with the three largest denominations being the Free Wesleyan Church (36% of the population), the LDS church (18%), and the Roman Catholic Church (15%) (Tonga Department of Statistics, 2011). These religions promote a traditional view of the family, where children are gifts, and men have a 'god given' right to lead (Bleakley, 2002). This belief system invariably limits a woman's opportunities, as it reinforces her status in society as second tier and deems her only valuable if she is having children. This contributes significantly to the cultural expectation that women pursue motherhood over a career. Additionally, although the Wesleyan church is committed to the "opportunity for women to be ordained into the ministry", it is unknown whether this occurs in practice, and the LDS church and the Roman Catholic Church are less progressive (The Wesleyan Church, n.d.). However, religious practices can also empower women by encouraging and assisting them to take charge with preparing for disasters at the family level. Within the LDS church, and wider society, women are encouraged to take control of these family DRR initiatives, thereby reducing their vulnerability.

As a result of the gender inequality in Tonga which is intensified by religion, women are also barely represented in Tonga politics. As explained previously, now only one out of 17 of the people's representatives in parliament is a woman. This adds to women's vulnerability in all areas of society, as their voices, needs and experiences are excluded from policy making and therefore they are less able to affect change at government levels (Morrow & Phillips, 2008; Austin & McKinney, 2016). Furthermore, it reiterates the fact that Tongan society does not value women as leaders. The political and economic realms are also affected by cultural norms that value traditional gender roles. While women

make up a significant portion of the higher manager and CEO positions, most women are working in unskilled, menial work or in the informal handicrafts sector (JICA, 2010). This is problematic as it means that women have less access to resources and may be financially dependent on men. The problems associated with women having less access to resources is well explained in the literature (Agarwal, 1994; Bradshaw, 2004; Bradshaw & Fordham, 2015; Enarson & Morrow, 1998b). Additionally, Tonga hasn't ratified CEDAW, and the public backlash to it shows a deep lack of understanding of the intentions of the Convention and highlights the significant gender inequality in wider society.

Thus, the Tongan context is extremely complex and often paradoxical. Women's roles and relationships are constrained by gender norms, which are products of the social systems and structures which are the backbone of Tongan society. These cultural norms can be extremely restrictive and add to the marginalization of women in society, politics, religion and the family. However, these norms can also encourage and enable women to become leaders in DRR in their families and communities. This generates a cycle, whereby women are active in the community because the norms and expectations of society promote and maintain it. Therefore, it is clear that the cultural context within which Tongan women live and work is the most important factor in determining female participation in DRR.

6.4 Implications of the Tongan Case Study for Current Practices of DRR

The experiences of women in Tonga raises several questions about the accepted ideas around DRR. Firstly, is it necessary in all cases for gender inclusive DRR to be promoted and lead by national policies? Secondly, if policies are less important in Tonga than previously assumed, what are the implications for how DRR practitioners and

researchers design and implement their projects? And thirdly, are the recommendations made by practitioners and policy makers for best practice DRR appropriate in all settings?

As explained in depth previously, there are many constraints on women's opportunities in Tonga, including the inability to lawfully own land; the low number of women in politics; the high rates of violence against women; the social expectation for women to have children and be family caregivers; the low number of women in employment, and the resulting high poverty rates for women, especially those who live rurally (JICA, 2010; Pacific Islands Forum Secretariat). The literature around gender and disasters attributes women's vulnerability to these factors, and a highly vulnerable status directly contributes to mortality in disasters (Bradshaw & Fordham, 2015; Enarson et al., 2018; Le Masson, 2103). It is also often assumed that women are not included in DRR, thereby increasing their vulnerability (Austin & McKinney, 2016).

However, in Tonga, women are extremely active in DRR, despite the lack of consideration for women in policy making or policy outcomes (at least for many years). The literature and international policy frameworks (for example, the SFDRR and the FRDP) push heavily for the acknowledgement of women in national policies as a key strategy to ensure that women are participating in DRR. Despite these international recommendations, only one current DRR related policy (the Climate Change Policy) mentions women or gender as a concept. The JNAP II (due later in 2018) will be the first of its kind to explicitly mention the importance of women's involvement, and the policy makers stated that this was included as per the donor's request. However, it is clear that women have been leading community DRR for years before any gender inclusive policies

(relating to DRR or development) existed, as evidenced by the strong female engagement with NGO programmes that date back many years.

This suggests that a focus on strengthening grassroots, bottom up actions and initiatives for DRR could have more impact than change at the policy level. Though most researchers frame the importance of policies by stating that they are key to ensuring that DRR is effective across different scales (Djalante, 2012; Gaillard & Mercer, 2013; Izumi & Shaw, 2012; MacGregor, 2009), there is some suggestion that action at the community level is most crucial (Johnston et al., 2012; Satterthwaite, 2011). A report on the Hyogo Framework for Action by Global Network of Civil Society Organisations for Disaster Reduction (GNDR) noted that the framework had little impact on DRR at local levels, and community-based organisations had a more influential role (GNDR, 2009). Presuming therefore that the case study of Tonga is evidence of the importance of community level DRR (over any other scale), this suggests that community based NGOS and related organisations are well placed to integrate gender concerns into projects. Policies could therefore as support for the actions at the local level, rather than be presumed to instigate these actions. In Tonga, this is seen through several NGOs, whose work in the communities is then translated into national level documents. Gender therefore becomes a focus in national policies and documents, because the NGOs and communities have included it. However, as NGOs are dependent on external funding, and may not coordinate with each other, their work may be done on an ad hoc basis (Shaw, 2003). NGO projects can therefore be unsustainable, and this suggests that governments could coordinate the work being done in a practical, rather than policy-driven sense.

The outcomes of the research in Tonga leads to a discussion about a larger issue of the conflict between best practice in the literature versus existing practices in different

cultural settings. When DRR practitioners and foreigners examine the state of DRR policies and the context within which women live in Tonga, it is easy to critique. Firstly, an outsider (especially from the West) can assume that all Tongan women are downtrodden and oppressed due to their social and political standing. It is certainly clear that women in Tonga have a lower social standing than men. The Tongan society is patriarchal and conservative, and women's rights are not a priority for the government. This is visible particularly in the outdated laws which deny women's the opportunity to own land, and the fact that only recently have Tongan women been protected by a law which allows them to report a domestic abuser.

It also seems that Tonga has purposefully disregarded women's rights, in particular through the decision not to ratify CEDAW. Tonga's decision not to ratify is based on several arguments, including the fear by the deeply religious public that it will require Tonga to sanction abortion and same sex marriage. However, the official position against CEDAW is that it will require Tonga to amend its Constitution (an action the government does not want to take) to allow women to own land, as women must be granted equal rights in law under the Convention. The Constitution of Tonga was written in 1875, at a time when it was taken for granted that women would have access to land through the *fahu* system (James, 1995). In the context of Tonga and *fahu*, it is therefore considered appropriate to limit women's freedoms in laws, as there is an assumption that her family will provide for her.

Considering the state of women's rights and their seemingly contradictory high level of involvement and respect in local level DRR, an argument can be made that perhaps the 'universal' recommendations for best practice DRR, and further, the 'universal' declarations of human rights are inappropriate in some contexts. As this thesis can attest,

best practices for DRR are informed by research which emphasises the linkages between women's vulnerability and their lack of involvement in DRR policies and practices. DRR policies and practices must therefore tick certain boxes to be legitimately gender inclusive (see the conceptual framework, Figure 2.1 for an example). However, this literature and the international frameworks which inform DRR are often crafted in a European setting. They reflect the values and discourses of a particular place and time, and embody a specific Western idea of development (Escobar, 1988). This often assumes that development is a natural process- though only when done in a way that is deemed acceptable by Western nations (Escobar, 1992). Through this Eurocentric or Western conceptualisation of development, non-Western countries are understood as 'underdeveloped', which provides a rationale for extensive and fundamental changes to be made at political or societal levels (Blaut, 1999; Escobar, 1992). The current emphasis on gender may reflect this dynamic, whereby the ideas from 'Europe' (or the Western world) are progressive, while the ideas of non-European countries are stagnant, and traditional (Blaut, 1987, 1999). Blaut (1987) states that within this dichotomy of developed and underdeveloped, traditional societies are synonymous with 'emptiness'. Countries like Tonga, where there is a strong emphasis on traditions are therefore assumed to be void of something, whereby 'something' is the values, laws and norms that Western nations display.

This has further implications for wider understandings of global development. It suggests that perhaps 'universal human rights' are actually 'Western human rights'. Several authors suggest that 'universal' rights are culturally relative and the ideas are only valid in the context in which they are conceived (Donnelly, 1982; Panikkar & Panikkar, 1982). Donnelly (1982) notes that other societies or religions (he includes Islamic, Confucian,

Russian, Indian and African) do not have the same understanding of human rights. Instead, 'rights' are often considered to be 'duties' of the state and individual (Donnelly, 1982). The presence of supposed universal human rights also does not guarantee their implementation in a country. Whether a nation implements these rights is within their jurisdiction and judgement, and other nations can only voice concern about this (supposing the human rights 'violation' is comparatively minimal) (Donnelly, 2007). As many Tongan policies are lacking what the Western world has decided is important – explicit acknowledgement of gender in policy and practice – Tonga's protection of human rights has been labelled by the UN Human Rights Council as inadequate ("National human rights body 'not feasible for Tonga'", 2018). However, as I have discussed, this is merely a reflection of a specific, Eurocentric set of ideals about proper development, and is not necessarily a 'universal truth'. A full analysis of this issue is unfortunately beyond the scope of this thesis. However, it can conclude that not only does the presence of gender in policy seem to be irrelevant for women's involvement the practice of DRR, but the current recommendations for DRR may not be culturally relevant.

6.5 Conclusion

This thesis has shown that gender inclusive DRR in Tonga is practiced outside of the influence of policy, and in spite of any gender discrimination that exists in a society. In Tonga, women are undoubtedly more vulnerable than men, due to the intensely patriarchal and conservative social systems and laws which restrict women's rights, and reinforce restrictive gender roles. These cultural norms can increase women's vulnerability by restricting their access to resources in regular life and also times of disaster. Despite their vulnerable status, women's issues are not integrated into current

DRR policies, though they are becoming more common in development policies in general. However, although the literature would assume otherwise, women are often the most active and valued participants in community DRR. This suggests that policies have little impact on the reality of DRR in Tonga. Consequently, the inclusion of women in DRR can be done at local levels, and there is opportunity for NGOs, DRR practitioners and policy makers to utilise existing gendered roles. Furthermore, this research suggests that international and regional frameworks which guide DRR may be inappropriate in the context of Tonga, raising questions about the role of Western ideals in non-Western contexts.

Chapter 7: Uncovering the Relationship Between Policy and Practice - A Conclusion

This research was predicated on the assumption that gender-inclusive DRR practices necessitate gender-inclusive DRR policies. The literature on DRR underlines the need for strong policies to reinforce or encourage actions at a grassroots level (Djalante, 2012, Gaillard & Mercer, 2013; MacGregor, 2009; Izumi & Shaw, 2012). Furthermore, the value of strong guiding policies for DRR is reinforced in international frameworks such as the SFDRR. It can therefore be assumed that a lack of acknowledgement of gender in policies would prevent (or at the very least, encumber) women's engagement with DRR at all levels. However, this thesis has shown that in fact, the cultural context and associated norms and laws are the most influential factor in determining women's involvement in DRR. The experiences of Tongan women also broach larger questions about the application of western values in non-western contexts.

7.1 Thesis Summary

The summary above is a condensed explanation of the conceptual framing, research methodology and eventual conclusions which were designed, followed and presented in this thesis. This research was born out of a desire to critically analyse the impact of DRR policies on practices. To analyse this, I chose to focus on women's experiences in DRR (using the theoretical lens of gender), as it is an area of the literature which is underdeveloped. In Chapter 2, I explored the literature on disasters and gender, and

identified the need for DRR which places women at the centre. Drawing together this literature, I designed a conceptual framework for guiding gender sensitive DRR.

To examine the reality of this issue and to locate the thesis in a real world case, I spent two months doing fieldwork in Tonga, speaking with key stakeholders and collecting information. Chapters 3 details my experience as a female pālangi researcher in Tonga. Due to the personal and sensitive nature of the research, it was crucial to reflect on my positionality and the ethical consequences of the research. I utilised the techniques of feminist research, which suggests that the researcher acknowledge the existence of a power dynamic work to gain respect through their research practices (England, 1994). To do this, I ensured that my interviewing technique was very casual and semi-structured. This facilitated the sharing of highly personal memories and stories from participants.

Chapter 4 then set the scene in Tonga by describing how the unique physical locations and social context could contribute to vulnerability. Owing to the location of the country in the Pacific Ocean on the edge of a tectonic plate, cyclones, tsunamis and earthquakes are major hazards in Tonga. These types of disasters are therefore a regular part of life, and both the public and the government are well versed on how to prepare and respond to them. During the fieldwork, many participants discussed the long-term effects of TC Ian which hit in 2014, and the 2009 tsunami in the Niua's island group. Many participants noted that TC Ian illuminated the problems with the DRR policies that existed at the time, including the lack of consideration for women's needs. Since these events, there has been many new DRR related policies which have been developed, and many have a gender focus.

Chapter 5 then delivered an examination of the major themes of this thesis, as told by the research participants. In particular, the chapter looked at the current state of female participation in DRR in practice, and the factors which could encourage or discourage this participation. Chapter 6 then brought together the expected and actual experiences of women in policy and practice, and confronting them with the framework for best practice. From the stories outlined in Chapter 5, Chapter 6 provided a critique of mainstream understandings of 'best practice' DRR, and suggested that over all else, DRR should be adapted to the context within which it occurs.

7.2 What Was My Point Again? Reflecting on the Research Goals and Conclusions

To assess the impact and conclusions of this study, I return to the three research questions which were described in the introductory chapter. They are:

1. What is the state of female participation in DRR in Tonga, both in practice and as outlined in policies?
2. How do DRR policies inform practices in Tonga?
3. What are the challenges and opportunities for women's participation in DRR in Tonga?

To answer the first question; women can either be active or inactive in DRR, depending on the scale. During the fieldwork period, it became immediately clear that women in Tonga are a highly valued and respected as informal leaders in their communities. Both male and female research participants noted that women were superior actors with regard to getting involved with DRR and development projects. Their participation was

often required to encourage the rest of the community to get involved. However, there was little mention of gender in the JNAP, which is the main DRR policy. There is no discussion on gendered vulnerability, no acknowledgement of women-specific needs or requirements in disaster, and very little in the way of partnerships with women. Many researchers have noted that DRR is traditionally very male dominated and biased (Ariyabandu, 2009; Enarson, 1998; Enarson & Morrow, 1998b; Fordham, 2004). A consequence of this is that women are invisible in DRR policies and practices, and the root causes of their vulnerability is not addressed (Enarson et al., 2007; Bradshaw & Fordham, 2015; Fordham, 1998). As women are often one of the most vulnerable groups in society and are disproportionately affected in disasters, actions should be made to reduce this risk rather than enhance it.

Consequently, there is an inconsistency between the involvement of women in DRR at the local and national level. While women are the most active and sought-after participants in DRR in the community, their needs and experiences are omitted from the policies at national levels. Admittedly, many of the more recent development and climate change policies are gender inclusive and advocate for equality and women's participation in decision-making processes. However, as explained throughout Chapter 5, the inclusion of women in community projects began much earlier than the creation of many of these policies, indicating that these policies likely built on the momentum that was already there. To answer question two; policies appear to have little effect on the reality of DRR in Tonga.

Lastly, question three can be answered by looking at the reasons for the dichotomy between policy and practice. Women were included in community level DRR for many reasons. NGOs and government stakeholders had acknowledged that excluding women

increased their vulnerability in times of disaster. This became apparent following TC Ian, where medical and relief supplies were found to be inappropriate for many women and young children. Additionally, the strictly enforced family roles and responsibilities encourage women rather than men to take part in DRR. Like in many other countries (both Western and non-Western), women in Tonga occupy the role of mother and caregiver, and are responsible for all household related organisation. As DRR is about ensuring a family's survival, it falls under a mother's duties. Furthermore, women seemed to be the most engaged group in the community. This statement was repeated by many participants, and was seen in the actions of women in everyday life and in times of disaster. Many participants also admitted that women were often the only groups in the community that were active, which was witnessed by myself at the community meeting in Haateihosi'i in Ha'apai. Women's capacity as leaders at the community level is therefore well documented and agreed upon by many stakeholders.

However, women's voices and needs were not included in national level DRR policies for many reasons. In Tonga, the culture is based on traditions which are often demeaning for women. Tongan culture is uniquely hierarchical, traditional and religious, and this creates a society whereby women are constrained by conservative norms and strict gender roles. An example given by a participant who struggled with it is the assumption that women will value motherhood over a career. The intensity of conservative religious beliefs in Tonga also adds to this expectation. Additionally, in some cases Tongan women do not have the same rights as their male counterparts, as it is not culturally appropriate. In ancient Tongan, women were granted an extremely high cultural status through *fahu*, which translated into material benefits through the socially sanctioned acquisition of her brother's assets. Many laws that exist in 21st century Tonga hark back to this time, though

the power of *fahu* and the associated benefits for women is waning. However, the laws have not been updated, and women still have no right to own land. This was identified as an issue for women's development at large by many participants. These factors create a culture which is very traditional and conservative, so there is a strong social backlash to concepts such as gender equality. This is evidenced by the social response to CEDAW, and the dislike for female leaders. Women are underrepresented in politics, as there is only one woman currently in parliament. These factors all contribute to culture whereby women rights are not a high priority, so there is a lack of women's issues in national level DRR.

The case study of Tonga therefore highlights many of the challenges and opportunities for women's participation in DRR. In particular, it suggests that Tonga cultural norms and laws can both hinder and enable women's participation in DRR. For example, the gendered division of labour in the household reinforces stereotypes about women's roles which then encourages negative reactions to women who strayed beyond these (seen in the backlash against one female participant who ran in an election). However, this also provides an opportunity for women to take charge with DRR in their families and wider communities. The case study also suggests that gender inclusive DRR could be most effectively implemented through NGOs rather than policies. The role of NGOs in Tonga and their success at integrating gender concerns shows that they connecting the national and community levels. In Tonga, many NGO programmes were established prior to the creation of any gender inclusive national policy, and this seemed to be an important factor in the strength of female leadership at the community level.

Lastly, this research also highlighted the possible implications for DRR practitioners and researchers who judge DRR from a western perspective. Several researchers have shown

that ‘development’ is often a Western imposed concept, which assumes that countries who do not adhere to Eurocentric or Western ideals are ‘underdeveloped’. Furthermore, other authors suggest that human rights are not a Universal truth, but are most applicable in the context they were written in. Therefore, this study suggests that current understandings of best practice for gender-inclusive DRR may be too generalised and ‘universal’ to be effective in all contexts. Guiding frameworks for DRR such as the SFDRR or the FRDP may be too generic to understand and account for any particularity at the national level. In the same vein, the findings from this study are also context specific and will likely not be replicable in other countries. Further research on the impact of international frameworks and national policies for DRR in different contexts could test the hypotheses of this research and offer a more nuanced perspective on recommendations for gender inclusive DRR.

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Appendix 1

Key areas in framework	Themes	Words/Phrases
1. **Integrating gender-specific knowledge into DRR policies and practices**	*Factors of Vulnerability for Women in Tonga*	Vulnerability
		Violence, sexual violence
		Abuse
		Land ownership
	The Benefits of Including Women's Knowledge in DRR	Women's needs, requirements
		Women's issues
		Knowledge, information
	Information Sharing Through DRR as a Mechanism to Increase Women's Capacities	Self-reliance, sustainability
		Working together
		Preparation
2. **Supporting women as key stakeholders in DRR**	*The Impact of Family Roles and Responsibilities*	Family, responsibilities
		Caregiving, mother
		Struggle
	Women's Participation in Community Initiatives for DRR	Active
		Organising
		Committees
		Gender roles
	The Societal Limitations on Women's Participation in DRR	Parliament
		Fahu, privilege
		CEDAW
3. **Integrating gender concerns into DRR actions and initiatives**	*The Importance of NGO and Community Initiatives for DRR*	Programmes, projects
		Processes
		Non-governmental organisation
	The Role of Context in Impeding or Encouraging DRR Actions	Shelter
		Religion, church

Table 9.1: Table showing the word and phrases which were identified as codes, and how they link to the sections of the framework. Source: Authors own, 2018.

Appendix 2

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Auckland, New Zealand
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The University of Auckland
Private Bag 92019
Auckland 1142, New Zealand

PARTICIPANT INFORMATION SHEET: Employee - Institutional stakeholder (government; non-governmental organisation / Community members participating in a DRR project

Project title: Examining gender in disaster risk reduction policies and practice: A Tongan case study

About the researcher: My name is Jenny Knight, and I am a student at the University of Auckland, New Zealand. I am enrolled in the Master of Arts programme in Geography, in the School of Environment. I am being supervised by Dr. JC Gaillard. I have previously studied the challenges in integrating disaster risk reduction and climate change policies in Tonga. I am now interested in the extent to which women are involved in Disaster Risk Reduction (DRR) activities in Tonga.

Project Description: This research aims to examine the inclusion of women in DRR, both as advised in policy and as experienced in practice in Tonga. Disasters affect everyone, but individuals or communities without access to particular coping mechanisms are most adversely affected. Unfortunately, one of the most vulnerable groups in disasters is women. The latest global and regional DRR policies acknowledge that gender can influence vulnerability, and guide DRR accordingly. However, it is unclear whether these recommendations are implemented in practice. This research will provide valuable information on the extent to which women are involved in DRR in practice, and compare this with what is seen in policy. It is intended to contribute to the literature on gender and disaster, and enhance the experience of practitioners, participants and policy makers in the field of DRR in Tonga.

I invite you to participate in this research. Your position as a stakeholder involved in a DRR project provides critical insight into how men and women are included in DRR. You are under no obligation to accept this request to participate in this research. If you chose to participate, you will be asked to sign a consent form.

Project Procedures: Your participation in this research is voluntary, and unpaid. Participation will involve a semi-structured, one on one interview with the researcher, lasting a maximum of 90 minutes. The interview will take place at an area of your choosing, such as your house, or a local café. You have the right to withdraw from the interview at any time.

The interview will be recorded using an electronic device, with your permission. The recording is optional, and you may opt out before the interview or at any point during the interview. If you chose to stop the recording you may restart it. You will indicate on the consent form that you wish to be recorded or not. If you do not wish to be recorded, handwritten notes will still be taken. This recording will be transcribed by the researcher and will not be disclosed to any third parties.

You may choose whether the interview takes place in Tongan or English. If the interview takes place in Tongan, a Tongan speaker will act as translator for the interview. A Tongan speaker will also transcribe the interview in this case. The translator and transcriber will be required to sign a confidentiality agreement.

Within 10 days of completing the interview, you will also have access to a transcript of the interview. This will be sent to you via email, or if you do not have an email, a physical copy will be delivered to you. Once you have been given the transcript, you will then have 14 days to approve or edit the transcription. After 14 days, you will be required to send the transcript back via email, or I will collect the physical copy. You may also withdraw your data from the research up to 30 days after the interview, should you change your mind.

Risks: Taking part in this research will require talking about your personal experience with disasters. If you find yourself becoming upset or distressed as a result of this, you are able to stop or pause the interview at any time, without judgment. If you feel distressed, you may also wish to call one of the following support lines. These are:
Women and Children Crisis Centre: +676 222 40
Lifeline Tonga: +676 23000 / 25144
Tonga Red Cross: +676 21360 / 21950

Confidentiality and anonymity: The information collected from you will be kept confidential. You may choose to be identified or remain anonymous in the research outputs. You will indicate on the consent form your preference. If you wish to remain anonymous in the output of the research, your personal information will be excluded, and you will be given a generic pseudonym such as 'participant 1'. If you choose to be anonymous in the research, there may be a chance that you could be identified by someone close to you through a description of your work or role. Please note that if you are uncomfortable with taking part in this research, or wish to edit your response, you will have the opportunity to terminate the interview or review the recording.

A summary of the research which you have participated in will also be given to non-governmental organisations and other agencies who have offered cultural advice and consulted on the research. This summary will comply with the conditions that you have agreed to on the consent form. For example, if you wish to remain anonymous, you will be anonymous in the summary given to the consultants.

Data storage: The recording and written notes will only be used to produce a Master's thesis, and the associated presentations and publications that may arise from that. All data produced by the participants will be secured in a locked cabinet at the University of Auckland for six years. Digital audio recordings will be kept on a password protected computer for this time. After six years, physical copies of notes will be shredded and digital files will be deleted.

Please take your time to read through the consent form and sign it. If you have queries or questions, please contact me.

Contact details and approval wording:

Researcher:

Jenny Knight
jkni581@aucklanduni.ac.nz

Supervisor:

Associate Professor JC Gaillard

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Head of Department:

Professor Paul Kench
School of Environment
University of Auckland
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For any concerns regarding the ethical issues, you may contact the Chair:

The University of Auckland Human Participants Ethics Committee,
Research Office, Private Bag 92019
Auckland 1142
Telephone: 09 373 7599 ext. 83711
Email: ro-ethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on 9/10/2017 for three years. Reference number 019991

Appendix 3

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Telephone: 64 9 373 7599 ext 88465

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Private Bag 92019
Auckland 1142, New Zealand

PARTICIPANT INFORMATION SHEET: Managers - Institutional stakeholders (government, non-government organisations, project leaders).

Project title: Examining gender in disaster risk reduction policies and practice: A Tongan case study

About the researcher: My name is Jenny Knight, and I am a student at the University of Auckland, New Zealand. I am enrolled in the Master of Arts programme in Geography, in the School of Environment. I am being supervised by Dr. JC Gaillard. I have previously studied the challenges in integrating disaster risk reduction and climate change policies in Tonga. I am now interested in the extent to which women are involved in Disaster Risk Reduction (DRR) activities in Tonga.

Project Description: This research aims to examine the inclusion of women in DRR, both as advised in policy and as experienced in practice in Tonga. Disasters affect everyone, but individuals or communities without access to particular coping mechanisms are most adversely affected. Unfortunately, one of the most vulnerable groups in disasters is women. The latest global and regional DRR policies acknowledge that gender can influence vulnerability, and guide DRR accordingly. However, it is unclear whether these recommendations are implemented in practice. This research will provide valuable information on the extent to which women are involved in DRR in practice, and compare this with what is seen in policy. It is intended to contribute to the literature on gender and disaster, and enhance the experience of practitioners, participants and policy makers in the field of DRR in Tonga.

Your agency or organisation has been chosen to take part in the research as you have experience with creating and implementing DRR policies and/or projects. Your organisation can thus provide critical insight into what steps are taken to involve women in DRR. We would like to ask your permission to interview your employees, to discuss their experience and thoughts on DRR in Tonga. With your permission, the interviews would take place during working hours, unless your employees find it more convenient to interview outside of work. It is expected that the interview will take no more than 90 minutes of your staff members' time.

You are under no obligation to accept this request for your employees to participate in this research. If you allow your staff to participate, you will be asked to sign a consent form indicating this. The interview will not be held without your assurance that your staff's participation or non-participation will not affect your relationship with your staff, or change their employment status.

Project Procedures: Your staff member's participation in this research is voluntary, and unpaid. Participation will involve a semi-structured, one on one interview with the researcher, lasting a maximum of 90 minutes. Participants have the right to withdraw from the interview at

any time. The interview will be recorded using an electronic device. This recording is optional and will only be used with the permission from your staff member and yourself. Your staff member may also stop the recording before the interview or at any point during the interview. If they chose to stop the recording you may restart it. If you or your staff member do not wish to be recorded, handwritten notes will be taken. This recording will be transcribed by the researcher and will not be disclosed to any third parties.

You staff will choose whether the interview takes place in Tongan or English. If the interview takes place in Tongan, a Tongan speaker will act as translator for the interview. A Tongan speaker will also transcribe the interview in this case. The translator and transcriber will be required to sign a confidentiality agreement.

Within 10 days of completing the interview, your staff member will also have access to a transcript of the interview. Once they have been given the transcript, they will then have 14 days to approve or edit the transcription. They may also withdraw their data from the research up to 30 days after the interview, should they change their mind.

Risks: Taking part in this research will require talking about personal experience with disasters. If your staff member finds themselves becoming upset or distressed as a result of this, they are able to stop or pause the interview at any time, without judgment. They are also provided with the following support lines to call.
Women and Children Crisis Centre: +676 222 40
Lifeline Tonga: +676 23000 / 25144
Tonga Red Cross: +676 21360 / 21950

Confidentiality and anonymity: The information collected from your staff member will be kept confidential and efforts will be made to protect their identity. Participants will be given generic pseudonyms such as 'participant 1'. However, they may consent to their personal information being used in the research outputs. It is important to note that there may be a chance that they could be identified by someone familiar with the research context. Participants will be informed of this prior to signing the consent form.

Additionally, you may choose whether you want your agency or organisation identified in this research. However, there is the chance that your agency or organisation may be identified by someone familiar with it. Total anonymity can therefore not be guaranteed to your staff member or agency/organisation.

A summary of the research will also be given to non-governmental organisations and other agencies who have offered cultural advice and consulted on the research. This summary will comply with the conditions that you have agreed to on the consent form. For example, if you wish for your company to remain anonymous, it will be anonymous in the summary.

Data storage: The recording and written notes will only be used to produce a Master's thesis, and the associated presentations and publications that may arise from that. All data produced by the participants will be secured in a locked cabinet at the University of Auckland for six years. Digital audio recordings will be kept on a password protected computer for this time. After six year, physical copies of notes will be shredded and digital files will be deleted.

Please take your time to read through the consent form and sign it. If you have queries or questions, please contact me.

Contact details and approval wording:

Researcher:

Jenny Knight
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Supervisor:

Associate Professor JC Gaillard
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For any concerns regarding the ethical issues, you may contact the Chair:

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Approved by the University of Auckland Human Participants Ethics Committee on 9/10/2017 for three years. Reference number 019991

Appendix 4

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PARTICIPANT CONSENT FORM: Community members participating in a DRR project & institutional stakeholders (government, non-government organisations)

THIS FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project title: Examining gender in disaster risk reduction policies and practice: A Tongan case study

Name of Researcher: Jenny Knight

Name of Supervisor: JC Gaillard

I have read the Participant Information Sheet, and I have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to take part in this research.
- I understand that my involvement in this research is voluntary and I am not being paid for this research.
- I understand that I am free to withdraw my participation and data from this research within 30 days of the interview, without having to give a reason. If I withdraw the information, all information will be destroyed.
- I know/do not know that the interview will take a maximum of 90 minutes.
- I agree/do not agree to be recorded during the interview. If I am recorded, I understand that I can stop the recording at any time during the interview
- I understand that the interviews will be transcribed.
- I understand that taking part in this research will require discussing my personal experience with disasters. I have been informed that I may stop or pause the interview if this is distressing, and have been provided with relevant support numbers.
- I require/do not require a Tongan interpreter during the interview.

- I understand that if an interpreter or transcriber is required, they will be required to sign a confidentiality agreement.
- I consent/ do not consent to be identified by name in this research. If I do not consent, I understand that my personal details will be kept private through the use of generic pseudonyms. I understand that full anonymity cannot be guaranteed.
- I understand that the information given in this research is confidential and will be kept securely for a period of six years, after which it will be destroyed. I understand that a summary of this research will be sent to groups or individuals who acted as cultural advisors. I understand that this summary will reflect the conditions outlined on this consent form.

- I would like/ would not like to be provided with a transcription of the interview to approve or edit. I understand that this will be given within 10 days of completion of the interview and that I will have 14 days to review or edit the transcription. After 14 days I understand that I will be required to return the transcript via email, or it will be collected by the researcher.
- I would/ would not like a summary of this research, a copy of the thesis or related publications.

These can be sent

by email to this address: _____

by post to this address: _____

_____

Name: _____

Contact details: _____

Signature: _____ Date: _____

Approved by the University of Auckland Human Participants Ethics Committee on 9/10/2017 for three years. Reference number 019991

Appendix 5

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PARTICIPANT CONSENT FORM: Managers - Institutional stakeholders (government, non-government organisations, project leaders)

THIS FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project title: Examining gender in disaster risk reduction policies and practice: A Tongan case study

Name of Researcher: Jenny Knight

Name of Supervisor: JC Gaillard

I have read the Participant Information Sheet, and I have understood the nature of the research and why my organisation or agency has been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree that my staff can part in this research.
- I understand that my staff's participation in the research is voluntary, and their taking part/ not taking part in the research will not affect their employment status or relationship with myself.
- I consent / do not consent to my organisation or agency being identified in this research. If I do not consent, I understand that full anonymity cannot be guaranteed, as there is a chance that my company or agency could be identified by someone familiar with the research context.
- I understand that my staff are free to withdraw their participation and data from this research within 30 days of the interview, without having to give a reason. If they withdraw their participation, all information will be destroyed.
- I agree/do not agree that the interview will take place during working hours, unless otherwise stipulated by the participant.
- I agree with my staff's preference to be recorded or not recorded during the interview. I understand that if they are recorded the interview will be transcribed and they will be given a copy of it within 10 days of completion of

the interview to approve or edit. I understand that they will have 14 days to review or edit the transcription.

- I understand that a Tongan speaker may act as an interpreter or transcriber. If an interpreter or transcriber is needed, that they will be required to sign a confidentiality agreement.
- I understand that taking part in this research will require discussing my personal experience with disasters, and that my staff have been informed that they may stop or pause the interview if this is distressing, and have been provided with relevant support numbers.
- I agree with my staff's decision to disclose or conceal their identity in this research. If they wish to conceal their identity, I understand that their personal details will be kept private through the use of generic pseudonyms. I understand that full anonymity cannot be guaranteed however, as there is a chance that they could be identified by someone familiar with the research context.
- I understand that the information given in this research is confidential and will be kept securely for a period of six years, after which it will be destroyed.
- I understand that a summary of this research will be sent to groups or individuals who acted as cultural advisors. I understand that this summary will reflect the conditions outlined on this consent form.

- I would/ would not like a summary of this research, a copy of the thesis or related publications (please circle those that apply)

  by email to this address: _____

  by post to this address: _____

Name: _____

Contact details: _____

Signature: _____ Date: _____

Approved by the University of Auckland Human Participants Ethics Committee on 9/10/2017 for three years. Reference number 019991