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**REMITTANCES IN THE FACE OF  
DISASTER: A CASE STUDY OF SAMOA**

**Loic Le Dé**

November 2015

A thesis submitted in fulfilment of the requirements for the degree of  
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## Abstract

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Over the last few decades, the number of disasters in Small Island Developing States (SIDS) has been constantly increasing. While usually portrayed as weak and passive victims in the face of disasters, the inhabitants of these countries have always demonstrated abilities to deal with such events. Remittances, the money and goods sent by migrants back to their home country, represent one of the many mechanisms that SIDS' populations use to overcome disasters. Yet, very little is known about remittances in a disaster context, including on their importance and role in the face of disasters, their long-term effects on people's recovery, and the implications remitting during and after such events may have on migrants who assist those in the country of origin.

The large majority of studies exploring remittances have adopted economic approaches. Most of the existing research has focused on the short-term effects of remittances in the receiving areas and generally concentrated on the impacts of remittances at national, regional or even global scale. While producing relevant quantitative data on processes occurring at a larger scale, such an approach has provided little information at household or small community level. Besides, this dominant economic-focused approach often overlooks the social, cultural, historical and emotional elements that shape remittances. Diverse social scientists have emphasised that remittances are not only money but also have more intangible meanings and implications. Although this more social perspective has produced a pertinent critique of economic-based research exploring remittances, it has generated very little quantitative information on this mechanism, including at the local level. This thesis is a first step towards bridging this knowledge gap.

The present research focuses on Samoa with the 2009 tsunami and the 2012 cyclone Evan as case studies. Using participatory techniques with disaster-affected households as well as with Samoan migrants living in New Zealand, this

thesis indicates that those with access to remittances could more easily deal with emergency problems and recovered more quickly than those who have limited access to this resource. In turn, reduced access to remittances often implied strong negative effects on people's livelihoods. This thesis emphasises that remittances reproduce or even intensify the inequalities and vulnerabilities existing pre-disaster. Finally, this research shows that remitting in a disaster context may have severe economic impacts on migrants. On the other hand, it also indicates that remitting may engender different positive effects, such as reinforcing the social ties amongst remittances senders and receivers.

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## List of acronyms

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AusAID Australian Agency for International Development  
BPoA - Barbados Programme of Action  
CBDM - Community-Based Disaster Management  
CBDRR - Community-Based Disaster Risk Reduction  
CBS - Central Bank of Samoa  
DBS - Development Bank of Samoa  
DM - Disaster Management  
DRM - Disaster Risk Management  
DRR - Disaster Risk Reduction  
GDP - Gross Domestic Product  
HFA – Hyogo Framework for Action  
ICRC - International Committee of the Red Cross  
MIRAB - Migration, Remittances, Aid, and Bureaucracy  
MWCSO - Ministry of Women, Community and Social Development  
NELM - New Economics of Labour Migration  
NGO - Non Governmental Organisation  
NDMO - National Disaster Management Office  
ODI - Overseas Development Institute  
PIC - Pacific Island Country  
PRA - Participatory Rural Appraisal  
RRA - Rapid Rural Appraisal  
SEU - Seasonal Employment Unit  
SHC - Samoa Housing Corporation  
SIDS - Small Island Developing States  
SNDR - Samoa National Development Report  
SNPF - Samoa National Provident Fund  
SUNGO - Samoa Umbrella for Non-Government Organisations  
UN - United Nations  
US - United States  
WIBDI - Women in Business Development Inc.

## Co-authorship forms

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Co-authorship form A: Le Dé L., Gaillard J. C. and Friesen W. (2013). Remittances and disaster: A review. *International Journal of Disaster Risk Reduction*, 4(1):34-43.

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## Co-authorship form A:



### Co-Authorship Form

Graduate Centre  
Clock Tower – East Wing  
22 Pinson Street, Auckland  
Phone: +64 9 373 7568 ext.81321  
Fax: +64 9 373 7610  
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Extent of contribution by PhD candidate (%): 90

#### CO-AUTHORS

Name	Nature of Contribution
Jean Christophe Gaillard	Supervision and advice for paper structure and proof-reading
Wardlow Friesen	Supervision and advice for paper structure and proof-reading

#### Certification by Co-Authors

The undersigned hereby certify that:

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- in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
JC Gaillard		10/06/2015
W. Friesen		14/5/15

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## Co-authorship form B:



### Co-Authorship Form

Graduate Centre  
 Clock Tower – East Wing  
 22 Princes Street, Auckland  
 Phone: +64 9 373 7999 ext 81321  
 Fax: +64 9 373 7810  
 Email: postgraduate@auckland.ac.nz  
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Nature of contribution by PhD candidate: Data collection, data analysis and paper writing

Extent of contribution by PhD candidate (%): 90

#### CO-AUTHORS

Name	Nature of Contribution
Jean Christophe Gaillard	Supervision and advice for paper structure and proof-reading
Waridlow Friesen	Supervision and advice for paper structure and proof-reading

#### Certification by Co-Authors

The undersigned hereby certify that:

- the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
JC Gaillard		6/04/15
W. Friesen		14/5/15

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## Co-authorship form C:



### Co-Authorship Form

Graduate Centre  
Clock Tower - East Wing  
22 Princes Street, Auckland  
Phone: +64 9 373 7999 ext 81321  
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Nature of contribution by PhD candidate: Data collection, data analysis and paper writing

Extent of contribution by PhD candidate (%): 90

#### CO-AUTHORS

Name	Nature of Contribution
Jean Christophe Gaillard	Supervision and advice for paper structure and proof-reading
Wardlow Friesen	Supervision and advice for paper structure and proof-reading

#### Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
JC Gaillard		10/06/2014
W. Friesen		14/5/15

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## Co-authorship form D:



### Co-Authorship Form

Graduate Centre  
Clock Tower – East Wing  
22 Princes Street, Auckland  
Phone: +64 9 373 7999 ext 81321  
Fax: +64 9 373 7610  
Email: [postgraduate@auckland.ac.nz](mailto:postgraduate@auckland.ac.nz)  
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Nature of contribution by PhD candidate	Data collection, data analysis and paper writing
Extent of contribution by PhD candidate (%)	90

#### CO-AUTHORS

Name	Nature of Contribution
Jean Christophe Gaillard	Supervision and advice for paper structure and proof-reading
Wardlow Friesen	Supervision and advice for paper structure and proof-reading
Smith Fagalua Matautia	Help with facilitation and translation of focus groups

#### Certification by Co-Authors

The undersigned hereby certify that:

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- in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
JC Gaillard		6/05/2015
W. Friesen		14/5/15
F.M. Smith		14/5/15

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## Co-authorship form E:



### Co-Authorship Form

Graduate Centre  
ClockTower – East Wing  
22 Princes Street, Auckland  
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Fax: +64 9 373 7610  
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Journal of Development Studies (in press).

Nature of contribution by PhD candidate: Data collection, data analysis and paper writing

Extent of contribution by PhD candidate (%): 90

#### CO-AUTHORS

Name	Nature of Contribution
Jean Christophe Gaillard	Supervision and advice for paper structure and proof-reading
Wardlow Friesen	Supervision and advice for paper structure and proof-reading

#### Certification by Co-Authors

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- in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
JC Gaillard		6/09/2015
W. Friesen		19/5/15

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## Co-authorship form F:



### Co-Authorship Form

Graduate Centre  
Clock Tower – East Wing  
22 Princes Street, Auckland  
Phone: +64 9 373 7500 ext 81321  
Fax: +64 9 373 7510  
Email: postgraduate@auckland.ac.nz  
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#### CO-AUTHORS

Name	Nature of Contribution
Dr. J.C. Gaillard	Supervision and advice for paper structure and proof-reading
Dr. W. Friesen	Supervision and advice for paper structure and proof-reading
M. Pupualii	help with organization of focus groups and feedback
C. Brown	help with organization of focus groups and feedback
A. Aupito	help with interviews, feedback and data collection

#### Certification by Co-Authors

The undersigned hereby certify that:

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- in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Dr. J.C. Gaillard		Click here 10/04/2015
Dr. W. Friesen		Click here 14/5/15
M. Pupualii		Click here 19/03/15
C. Brown		Click here 21/02/15
A. Aupito		Click here 10/03/2015
		Click here

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## Co-authorship form G:



### Co-Authorship Form

Graduate Centre  
 Clock Tower – East Wing  
 22 Princes Street, Auckland  
 Phone: +64 9 373 7599 ext 81021  
 Fax: +64 9 373 7610  
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The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
JC Gaillard		10/04/2015
W. Friesen		14/5/15

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# Chapter 1 Introduction

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## 1. 1 Introduction

In the last four decades, the number of disasters has been constantly increasing worldwide (CREED, 2015). Small Island Developing States (SIDS) are identified as particularly vulnerable to disasters (HFA, 2005-2015). Scientists generally emphasise their geographical location being highly exposed to natural hazards, small size, weak economies, limited technical capacities and dependence on foreign aid (Briguglio, 1995; Pelling and Uitto, 2001). At the same time, the populations in SIDS have always demonstrated abilities to respond and adapt to recurrent natural hazards, with strategies based on their local and traditional knowledge (e.g. food preservation, traditional house building, environment knowledge, crop resilience) and social organisation and network (e.g. co-operation, reciprocity, kinship) (Campbell, 2009; Lewis and Kelman, 2010; Mercer et al., 2007; Rampengan et al., 2014).

Remittances, the money and goods sent by migrants back home, are one of the diverse strategies that local people from SIDS utilise to make a living (Akersson, 2011; Amuedo-Dorantes et al., 2010; Connell and Brown, 2005; Orozco, 2006). Increasingly, research indicates that remittance flows may intensify significantly in time of disaster (Amuedo-Dorantes et al., 2007; Ratha and Sirkeci, 2010). Research from the Overseas Development Institute (ODI) initiated in the mid-2000s was the first to highlight the significance of remittances during crisis. It was emphasised that remittances could play a central role in people's efforts to deal with emergency needs (Lindley, 2006; Wu, 2006) and suggested that such mechanism could be very important in the post-disaster recovery (Deshingkar and Aheeyar, 2006; Suleri and Savage, 2006). In recent years, this mechanism has often been compared with an informal insurance or safety net in the face of crises (Rapoport and Docquier, 2006; Yang and Choi, 2007). Yet, we know little about the role and importance of remittances in disasters, their impacts on long-



term recovery, and the implications remitting can have for migrant senders who try to assist their kin. This thesis aims to fill this knowledge gap.

Samoa, a SIDS located in the Pacific region was chosen as a case study. Section 1.9 of this introductory chapter provides the justification for this choice as well as more detail on the study sites. Before that, sections 1.2 to 1.4 briefly review the evolution of thinking in disaster research and provide some background on disaster and remittances in SIDS. Section 1.5 develops the rationale for undertaking this thesis and section 1.6 details its aim and objectives. Section 1.7 and 1.8 outline the conceptual and methodological approaches adopted to attain specific objectives. Section 1.10 highlights the thesis contribution to existing knowledge. Finally, section 1.11 provides the structure of the thesis.

## **1.2 A short background on disaster research**

A disaster is commonly defined as a disruption of social order so significant that it surpasses the ability of an impacted community or society to cope with its own resources and thus external assistance is required (Quarantelli, 1998). Traditionally, disaster research has been considered from physical science perspectives, including seismology, meteorology, hydrology and volcanology. These approaches predominantly focus on the intensity, scale and frequency of natural hazards as the cause of damage (Heijmans, 2009). What Hewitt (1983) has named *the dominant hazard-focused viewpoint*, usually considered disasters as natural and unpredictable, separated from the wider political, historical, cultural, social and economic conditions.

Yet, the importance of the human dimension in disaster has been identified since the 1940s with the works of White (1945) on the Mississippi river basin, and the assumption that disasters are natural became widely criticised in the late 1970s (Cuny, 1983; Hewitt, 1983; Torry, 1978; Watts and Bohle, 1993; Wisner et al., 2004). Contrasting with the dominant view, this 'radical' approach emphasised that disasters are not natural and the sole results from extreme events, but are

rather political and socio-economic in their origin. Different studies indicate that disasters occur because of an exposure to natural hazards and a context of vulnerability that is triggered by patterns of resource access (Chowdhury et al., 1993; Gaillard et al., 2007; Harwell, 2000; Kelman, 2006). Vulnerability refers to the elements of society making it likely that a hazard will be transformed into a disaster (Cannon, 1994). Indeed, people can be vulnerable in different ways, socially, geographically, economically, politically, and a combination of these, which is often the result of limited access to land, financial resources, information, institutional support, social networks, and weak political voice (Chambers and Conway, 1992; Scoones, 1998; Wisner et al., 2004).

The significance of the human dimension in disaster research and the notion of vulnerability in the understanding of disaster risk started to be recognised by more conventional wisdom in the mid-1990s at the World Conference on Natural Disaster Reduction (WCNDR, 1994). The Yokohama Message emphasised that: “Whilst the natural phenomena causing disasters are in most cases beyond human control, vulnerability is generally a result of human activity. Therefore, society must recognise and strengthen traditional methods and explore new ways to live with such risk, and take urgent actions to prevent as well as to reduce the effects of such disasters” (WCNDR, 1994: 9). Nowadays, international institutions, academics and practitioners agree that disaster risk is part of the everyday life of the poor and thus, reducing the risk of disaster is strongly linked with providing the conditions for improved personal and social protection within a broader context of sustainable development (UN/ISDR, 2004). Strategies to reduce the risk of disaster involve identifying the capacities and vulnerabilities of the local communities, thus requiring the involvement of those directly concerned (Heijmans, 2009; Pelling, 2007).

Despite these evolutions in disaster research, the *hazard-focus viewpoint* is still predominant. Current policies are generally based on the transfer of knowledge and technology from industrialised countries towards poorer nations (Bankoff, 2001; Gaillard and Mercer, 2013). Responses provided tend to emphasise governments and aid agencies knowledge and actions, rather than taking into

account local people's efforts to overcome disasters (Heijmans, 2001). This approach often has led to technical and structural solutions to Disaster Risk Reduction (DRR) and Disaster Management (DM), somehow reflecting a relationship of human control over nature (Kelman and Lewis, 2005). Besides, such an approach has greatly contributed to the ideas that disasters are a matter for experts (Bankoff, 2001). This viewpoint tends to be reinforced by the way the media portray disaster-affected people (Manzo, 2009). Local communities are usually presented as poor victims impacted by events that go beyond their control, thus participating in what Furedi has qualified as the "cultural narrative of vulnerability" (Furedi, 2007: 487). Accordingly, agencies involved in DRR and DM still operate in a short term and top-down fashion, neglecting local populations' perception of disasters, often making suppositions on their needs and priorities, and failing to integrate them as actors of the response and recovery (Heijmans, 2009).

Local communities are neither helpless nor passive and always display abilities to face and adapt to recurrent shocks and changing environments. Moore was the first to theorise the notion of 'disaster subculture' that he defines as "those adjustments, actual and potential, social, psychological, and physical, which are used by residents of such areas to cope with disasters which have struck or which tradition indicates may strike in the future" (Moore, 1964: 195). Thus, he indicated that individuals and communities develop diverse mechanisms to cope with recurrent dangers. These include local knowledge, values, norms, beliefs, traditional practices, and solidarity networks (Anderson, 1965; Wenger and Weller, 1973). These mechanisms are based on people's capacities and can often be crucial in the face of disasters. Indeed, academics and practitioners increasingly emphasise that reducing the risk of disaster requires building on people's capacities and the different strategies that they apply as means of protection (Anderson and Woodrow, 1989; Gaillard and Mercer, 2013; Twigg, 2007).

Community-Based Disaster Risk Reduction (CBDRR) and Community-Based Disaster Management (CBDM) approaches argue that DRR should not be the sole

task of experts (Pandey and Okazaki, 2005; Shaw et al., 2011). Instead, risk reduction should first and foremost be considered from the perspectives of those directly concerned (Mercer et al., 2010). This of course involves understanding what the goals that people aspire to are and this implies drawing on the different livelihood strategies that they use to achieve them (Ashley et al., 1999). Nonetheless, it does not mean excluding governments from this process. Rather, relevant institutions should work together with local populations in finding ways to support their actions, ones that are generally culturally and socially fitting with local context (Twigg, 1999). This approach was also emphasised in 1994 through the Yokohama Message: “Community involvement and their active participation should be encouraged in order to gain greater insight into the individual and collective perception of development and risk, and to have a clear understanding of the cultural and organisational characteristics of each society as well as its behaviour and interactions with the physical and natural environment” (WCNDR, 1994: 4-5). Such a viewpoint was re-iterated in the review of the Yokohama Strategy used in preparation of the Hyogo Framework for Action (HFA) for the 2005-2015 decade. However, there is still a gap between conceptual discourse and practice since agencies often fail to include within their DRR and DM programmes the mechanisms applied by local people to overcome disasters (Gaillard and Mercer, 2013). Disaster-impacted people are often treated as “recipients” or even “clients” of DRR and DM programmes, with experts doing things to and for them, rather than together with them (Weichselgartner and Obersteiner, 2002: 76).

### **1.3 SIDS and disasters**

SIDS (see Table 1.1) are recognised as highly vulnerable to disasters. They have similar vulnerabilities to other low-income nations, including the lack of infrastructure, weak governance, colonial past, and imperfect social security system. Moreover, they have inherent vulnerabilities such as remoteness, high exposure to natural hazards, limited financial and technical capacities, dependence on imported goods and international aid, and limited natural

resources (not an exhaustive list) (Bettencourt, 2006; Briguglio, 1995; Lewis, 2009; Pelling and Uitto, 2001). Thus, on multiple occasions the international community has underlined the necessity to reduce SIDS vulnerability to disasters. In 1994, the Barbados Programme of Action (BPoA) first recognised the need for specific policies, actions and measures to be taken at national, regional and international scales to enable SIDS achieving sustainable development. In 1999, the United Nations (UN) General Assembly called for mutual efforts to implement BPoA measures. The Mauritius Declaration (MSI, 2005) re-affirmed the necessity to support SIDS towards goals of vulnerability reduction and sustainable development. Paragraph 6 of the Mauritius Declaration underlined the need to “develop and strengthen effective disaster risk reduction [...] emergency relief, and rehabilitation and reconstruction capacities” (MSI, 2005: 2). Such commitment was re-iterated in 2014 at the Third International Conference on SIDS held in Samoa. Despite particular attention on SIDS and significant improvements towards sustainable development in the last 20 years, SIDS continue to be highly vulnerable, facing important DRR and development challenges.

Table 1.1: List of Small Island Developing States (SIDS)

The AIMS (Africa, Indian Ocean, Mediterranean and South China Sea)	The Caribbean	The Pacific
Cape Verde	Anguilla	American Samoa
Comoros	Antigua and Barbuda	Commonwealth of Northern Marianas
Guinea-Bissau	Aruba	Cook Islands
Maldives	The Bahamas	Fiji
Mauritius	Barbados	French Polynesia
Sao Tome and Principe	Belize	Guam
Seychelles	British Virgin Islands	Kiribati
Singapore	Cuba	Marshall Islands
	Dominica	Federated State of Micronesia
	Dominican Republic	Nauru
	Grenada	New Caledonia
	Guyana	Niue
	Haiti	Palau
	Jamaica	Papua New Guinea
	Montserrat	Samoa
	Puerto Rico	Solomon Islands
	Saint Kitts and Nevis	Timor-Leste
	Saint Lucia	Tonga
	Saint Vincent and Grenadines	Tuvalu
	Suriname	Vanuatu
	Trinidad and Tobago	
	U.S. Virgin Islands	

Source: United Nations Department of Economic and Social Affairs, 2015

#### **1.4 SIDS and remittances in disasters**

Remittances are one of the different strategies that inhabitants from SIDS use to make a living. The International Monetary Fund defines remittances as “household income from foreign economies arising mainly from the temporary or permanent movement of people to those economies. Remittances include cash and noncash items that flow through formal channels, such as via electronic wire, or through informal channels, such as money or goods carried across borders”(IMF, 2009: 272). Of course, remittances are not a mechanism confined to SIDS populations as this resource has become crucial to many households from low-income countries (Adams and Page, 2005). Nonetheless, the highest remittances levels worldwide (as percentage of Gross Domestic Product (GDP)) are found in SIDS. Indeed, a study from Amuedo-Dorantes (2010) estimates that remittances are twice as high in SIDS as in low-income nations. For example, in the East Asia and Pacific region (a region well known for its propensity to disasters), seven of the ten top remittance-recipients as share of GDP are SIDS. These respectively are Samoa, Tonga, the Republic of the Marshall Islands, Timor-Leste, Kiribati, Fiji and Vanuatu (World Bank, 2014). In some SIDS, remittances are increasing at a considerable rate (Brown and Jimenez, 2008). One of the most impressive figures are certainly those of Jamaica which became the largest remittances-recipient of the English-speaking Caribbean nations, with remittances inflows growing by 697% between 1990 and 2004, representing a 46% yearly increase (Attzs, 2008).

In the face of disasters, remittances levels can increase considerably as migrants commonly try to assist their kin impacted by such events. For example, during cyclone Ofa and Val respectively occurring in 1990 and 1991, Samoan households from the village of Fusi affirmed having received more remittances than in any non-disaster year (Muliaina, 2003). In the aftermath of the Haiti earthquake, Haitian migrants came massively to support economically and emotionally their relatives affected by the disaster (Lundy, 2011). In addition, varied studies from the World Bank show that remittances were sent years after climate-related disasters hit Dominican Republic (World Bank, 2004 quoted in

Naik et al., 2007), Jamaica and Haiti (Mohapatra et al., 2009). These different studies suggest that for many households from SIDS, remittances are important in overcoming disasters. However, current knowledge is very limited about the role and significance of this mechanism in this context. Questions include: if and how access to remittances shapes vulnerability; to what extent do remittances help local people dealing with disasters both in short-term coping and long-term recovery; and what implications remitting can have for migrant senders who try to assist their kin; these questions have been largely under-researched. Nevertheless, they represent central issues to disaster research and DRR.

### **1.5 Statement of problem and rationale of the thesis**

The limited knowledge on remittances in disaster lies mainly in the approach commonly adopted in current research. The majority of studies have focused on the short-term impacts of remittances in crisis. Besides, most of the existing research has adopted economic-based approaches. These frequently utilise econometric methods that are often mixed with questionnaire-based surveys (Li and Wang, 2015; Yang and Choi, 2007), and investigate the effects of remittances at national, regional or even global scale (Mohapatra et al., 2009; Schrieder and Knerr, 2000). This dominant approach has provided valuable quantitative information on processes occurring at a broader level (e.g. brain drain phenomenon, migration fluxes, effects on exchange rates of a country). However, it has generated little information on remittances at community or household level and commonly fails in taking into account the cultural, social, and emotional factors that shape this people-based strategy (Lianos, 1997; Lindley, 2008).

Social scientists, generally sociologists, anthropologists and geographers, have criticised the economic lens within which this dominant approach assesses remittances, emphasising that remittances are not only a financial resource but are also social and cultural resources since they are based on kinship relationships (Levitt, 1998). Thus, they argue that notions of reciprocity, social norms, cultural values, beliefs, feelings and historical perspectives are different



elements that must be considered if one wants to understand remittances practice, including on the reasons and impacts these have for senders and receivers (Lilomaiava-Niko, 1993; Marsters et al., 2006; Vertovec, 2001). However, while producing a relevant critique of economic-based studies investigating remittances and generating important knowledge on this practice, this more social approach usually provided little or no quantitative data on remittances, including at the local scale.

Yet, appraising the importance and contribution of this strategy in people's efforts to overcome disasters inevitably requires integrating both quantitative and qualitative information (Rahman and Fee, 2014). Besides, understanding the relationship between vulnerability and access to remittances as well as the reasons, outcomes, and impacts of this strategy certainly necessitates adopting a long-term perspective. It also requires an approach that places those who receive and send remittances at the centre of the research process.

## **1.6 Aim and objectives of the thesis**

Drawing on these issues, the overall aim of this research is to investigate the contribution of remittances in households' capacities to respond to disasters and reduce their vulnerability to natural hazards. This general goal is achieved through three objectives:

- To investigate the importance, role and impacts of remittances in households' livelihood strategies to overcome disasters.
- To explore the relationship between access to remittances and vulnerability, and investigate the dynamic of this relationship during and after disaster.

- To evaluate migrants' role during and after disaster, the influence of such an event in their decision to send remittances, and the related impacts on their own lives and livelihoods.

In order to address these objectives, this thesis uses a sustainable livelihood approach and participatory methods, which aim at integrating the view from local communities on issues related to remittances, vulnerability, livelihood strategies and disasters.

### **1.7 Livelihood as conceptual approach**

The concept of livelihood arose in the late 1980s to better assess how people who live in different places and within diverse socio-economic and political contexts make a living, and to depict the livelihood strategies that they use to deal with stresses and shocks (Bebbington, 1999). This conceptual framework focuses on people's strength and emphasises individuals and communities' perceptions of their own needs (Scoones, 2009). The most accepted definition is certainly the one provided by Chambers and Conway (Chambers and Conway, 1992: 1): "A livelihood comprises people, their capabilities and their means of living, including food, income and assets. Tangible assets are resources and stores, and intangible assets are claims and access. A livelihood is environmentally sustainable when it maintains and enhances the local and global assets on which livelihoods depend, and has net beneficial effects on other livelihoods. A livelihood is socially sustainable which can cope with and recover from stress and shocks, and provide for future generations."

Livelihood perspectives cut across the limits of more conventional views that focus on definite sources of income such as employment, but rather recognise that people's means to make a living are usually made of a combination of, and trade-offs between, diverse tangible and intangible resources and activities (Chambers and Conway, 1992). The notion of entitlement to access and utilisation of livelihood resources is fundamental to the concept of livelihood,

which depends on people's rights and capabilities to get external support, including from governments, kin, local associations, religious organisations, and Non Governmental Organisations (NGOs) (Scoones, 1998; Watts and Bohle, 1993). Furthermore, livelihood, vulnerability and capacity are joined concepts, as low capacities or high vulnerability mirror reduced entitlement to livelihoods.

Over the years, governments and NGOs have widely used sustainable livelihood approaches to foster development. This conceptual approach has been applied to different fields of study such as development in rural areas (Devereux, 2001; Scoones, 1998), armed conflicts settings (Lautze and Raven-Roberts, 2006; Le Billon, 2000), and has been increasingly used to understand people's vulnerability to natural hazards and post-disaster recovery contexts (Gaillard et al., 2009; Sanderson, 2000). The core theories of the sustainable livelihood approach are (based on Ashley et al., 1999):

- Putting people at the centre of development. This requires analysing their livelihoods and how they change in the face of shocks and stresses. It also means involving people in the research and development process and respecting their viewpoint as well as supporting them in achieving their own livelihood objectives.
- Recognising the complexity and multiplicity of livelihood strategies they adopt and livelihood outcomes they pursue. This requires assessing the different opportunities and constraints that they are exposed to, which imply appraising the varied factors at play and understanding the different levels in which they occur.
- Understanding the dynamic nature of livelihoods. This entails comprehending patterns of changes and relationship between the different factors that shape livelihood strategies and outcomes.
- Focusing on people strength and emphasising individuals and communities' perception of their own needs.

- Bridging the gap between global, national, and local scales.

Livelihood perspectives imply the participation of local people in research that aims at lifting their well-being and addressing development and DRR goals. Local people are the best placed to identify their own livelihoods, capacities and priorities, and ultimately are those directly concerned with DRR and development objectives (Twigg, 2001). A participatory approach is used in this thesis. The rationale for using such an approach is detailed in the following section.

### **1.8 Methodological approach: participatory methods**

In an effort to apprehend the difficulties faced by vulnerable people and to better assess their livelihoods, development agencies and academics have increasingly advocated the use of participatory methods (Holland and Blackburn, 1998; Mansuri and Rao, 2004). Contrasting with more conventional approaches such as questionnaire-based surveys and econometric methods, participatory techniques utilise a wide range of tools to learn “from, with and by” local communities (Cornwall, 2000), in their own terms and frameworks of understanding (Pain and Francis, 2003). Drawing on people’s knowledge, skills and experiences, participation should be carried out by local communities rather than for them (Chambers, 1994b; Freire, 1970). Participatory methods should allow local people “to share, enhance, and analyse their knowledge of life and conditions, to plan and to act” (Chambers, 1994a: 953).

Nowadays, participatory approaches and methods have proliferated as they are culturally accepted by local communities and are accessible to many practitioners involved in development. Participatory methods have a large range of applications such as land tenure, urban planning, sustainable farming practices, health care, AIDS, conflict resolution, natural resources management, and domestic violence (Daze et al., 2009; Jayakaran, 2002; Rambaldi et al., 2007). This diversity of research fields and practical experiences have contributed

significantly to methodological development, including on how to generate quantitative data (Mayoux and Chambers, 2005; Cornwall, 2011). Indeed, different organisations and academics have increasingly used participatory techniques for DRR, aiming for example at integrating indigenous and scientific knowledge, mapping hazards, assessing levels of vulnerability and capacity, and improving community planning (Abarquez and Murshed, 2004; Gaillard and Maceda, 2009; Mercer et al., 2010; Trujillo et al., 2000).

In this thesis, the use of participatory methods lies in two key aspects. Firstly, conventional methods like survey-based research generally utilise questionnaires with closed-ended questions, which tend to generate limited qualitative information and reflect the perception of those external to the processes occurring at a local scale (Chambers, 1994a). Likewise, economic methods commonly used to assess remittances provide limited insight for DRR, such as the role and significance of remittances in a disaster context. Besides, the literature often emphasises the difficulties associated with the measurement of the real flow of remittances that are also sent in the form of goods or through informal channels (Connell and Brown, 2005). Remittances involve social networks, and thus have social, cultural and emotional meanings and implications. Appraising the tangible and more intangible elements linked to this practice should reflect the view of those who receive and send remittances. Moreover, quantitative participatory methods permit overcoming some of the difficulties linked to the measurement of remittances and allow capturing patterns that more conventional methods cannot apprehend.

### **1.9 Samoa and New Zealand as case studies**

The core of this research focuses on the remittances-receiving area experiencing disaster. Samoa was chosen as a case study because of its status of SIDS, its high vulnerability to disasters and elevated levels of remittances. This country is located in the South Pacific region and is composed of two main islands, Savaii and Upolu. Samoa is a Pacific Island Country (PIC) and is one of the fifty-one

SIDS. This sub-section briefly explains the traditional social organisation of Samoan society, provides some historical background in order to understand the Samoa-New Zealand relationship, outlines the case studies chosen for this research project and details the fieldwork process in both Samoa and New Zealand.

### *1.9.1 Traditional organisational structure and kinship in Samoan society*

Samoan society consisted of groups of localised families (aiga), where the chiefly (matai) system and land tenure played a central role (Tcherkezoff, 1992). The matai was elected by the other members from the aiga. Matai title resulted from good services (tautua) such as during fa'alavelave that are life cycle events such as funerals, weddings, and title bestowals. Being a matai involved the management of the aiga's resources on behalf and for the benefit of its members (Macpherson and Macpherson, 2009). Central to the matai's role was the management of the land (Fana'afi, 1986). Indeed, the land pertained to the aiga and was supposed to be passed on to the following generation. It was the matai's responsibility to keep the aiga's heritage, to fairly allocate it to the members who wanted to cultivate or live on it, and to manage it effectively (Fana'afi, 1986). This implied that all the family members had the rights to access and utilise the land (e.g. for agricultural purpose or to build a house) in their father's or mother's villages. Yet conditional to these rights was the fulfilment of diverse obligations or duties to serve (tautua) the matai, to protect the land and preserve the honour of the aiga (Macpherson and Macpherson, 2009). Indeed, the members of the aiga, who were untitled (taule'ale'a), had obligations towards the matai and each other (Lilomaiva-Niko, 1993). The recompense for such services encompassed psychological and material security. For example, the land tenure and kinship system or aiga, ensured Samoans would always have a piece of land to cultivate or live on. Besides, good services meant the possibility, at least for men<sup>1</sup>, to some day get a role of leader, and thus hold more socio-economic and political power (Macpherson and Macpherson, 2009).

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<sup>1</sup> Even though women can become matais, in practice men largely hold those titles.

Kin groups were the space within which services and goods were regularly exchanged. On a day-to-day basis this implied the exchange of food, labour, advice, and equipment such as fishing gears and agricultural tools. Moreover, exchanges took place in the public sphere in a more visible or formal way, especially during fa'alavelave where Samoans showed respect to their kin through food, fine mats, and in mobilising social resources. Kinship was therefore the foundation of Samoan social and cultural organisation (Kramer, 1994). It implied the obligation to give to kinship members that expressed a reasonable request, and the right to expect that the services and goods given would be returned at some point in time. Such form of exchange or reciprocity both reproduced and strengthened through time the kinship system and kin groups (Macpherson and Macpherson, 2009). Lilomaiava-Niko (1993:46) wrote "kinship is the basis for group and individual identity, basis for claiming rights to land and title, basis for obligation, participation and reciprocity". Ideally, the aiga was led by a matai who ensures social unity of his kin group and contributed to its welfare and dignity, thus enhancing its material and socio-political status. Furthermore, Lilomaiava-Niko (1993:48) emphasised that "Samoans take pride in their family name or matai of their aiga. This is where they find identity and sense of belonging". This form of social organisation has, until today, remained very preserved (Macpherson and Macpherson, 2009).

### *1.9.2 First colonial contacts: Missionaries and Germans arrival*

Jacob Roggeveen was the first explorer to discover Samoa in 1722. Louis de Bougainville followed him in 1768. However, these two explorers never went ashore. Thus, Samoa's first formal contact with foreigners occurred in 1830; missionaries from the London Missionary Society (LMS) who stayed within the Samoan population in order to develop Christianity. As a result, a polytheist religion was replaced by a monotheist religion (Macpherson and Macpherson, 2009). However, the church soon understood that the durability of Christianity in Samoa could only be possible with a close cooperation with the traditional organisation system (Thorton, 2010). With matais' approvals and adaptation to the Samoan traditional culture, Christianity developed rapidly to play a central

role in Samoan culture.

Over the mid to late 19<sup>th</sup> century three foreign powers were competing for the 'ownership' of Samoa, including the United States (US), Britain and Germany. The Berlin Act was signed in 1889 giving Germany the administration of the Western islands of Samoa (Savaii and Upolu) while the US would administer the Eastern islands of Samoa, changing its name to American Samoa. Germans colonised Samoa in order to develop the production of copra, mainly via the Deutsche Handels-und-Plantagen Gesellschaft der Sudsee Inseln zu Hamburg (Meleisea, 1987). Germans' main interest was commercially driven, which also involved introducing workers from China and Melanesia since the Samoans did not want to work on plantations (Kerslake, 2010). Germany administered Samoa until the 29 August 1914, when the New Zealand expeditionary force, under the command of Lieutenant-Colonel Robert Logan, reached Samoa's shores. A long-lasting relationship between New Zealand and Samoa was therefore starting.

### *1.9.3 New Zealand administration in Samoa*

At the beginning of World War I, New Zealand took over the administration of Samoa, thus succeeding Germany. Logan, the first administrator of New Zealand in Samoa, enforced numerous rules that were going against Samoan culture and norms. He proclaimed the interdiction to travel by boat or canoe, the main way of transport for Samoans (Meleisea, 1987). He also imposed curfews overnight with the prohibition to move from one village to another. Alcohol was also banned for Samoans, but authorised for Europeans. Logan was surely unpopular, yet such unpopularity would increase after the influenza epidemic killed thousands of Samoans. On the 7 November 1918, the influenza epidemic arrived in Samoa through the Talune, a vessel coming from Auckland. Samoa had not been informed of the deadly disease, which quickly spread over the country, with nearly every family having a death. Yet, such catastrophe could have been avoided. In fact, medical assistance was provided to New Zealanders but not to Samoans. American Samoa also offered assistance, but Logan rejected it. Thus, Samoans blamed New Zealand's poor administration for such catastrophe, but



Logan denied responsibility and in turn blamed Samoans for not dealing well with the disease. Overall, the influenza resulted in 22% of Samoans dying versus only 0.5% of the New Zealand population living in Samoa (Kerslake, 2010). This event worsened the Samoan's population trust in and relationship with the New Zealand administration.

As a result, on the 28 June 1919 the League of Nations mandate was introduced in order to make New Zealand mandate more ethical and to adopt a humanitarian approach to the Samoa-New Zealand relationship (Meleisea, 1987) Richardson administered such mandate. Yet, under this new and supposedly more equitable mandate, Samoan could still not voice their opinion within the affairs of their country. Richardson's neglect for Samoan people, added to the maltreatment in the early years of New Zealand colonial administration and the reminiscence of the 1918 influenza, led to the rise of the Mau, a movement of resistance to New Zealand administrators. The core claim of the Mau was "self-government of Samoa by Samoans" (Kerslake, 2010: 26). The reaction from the New Zealand colonial power was quite repressive as Samoans who were part of the Mau were expelled from their villages, imprisoned, or deported to New Zealand. Such an approach was going against the League of Nations mandate. On the 25 December 1929, a peaceful Mau procession led by the three highest chiefs, Tamasese Lealofi III, Tuimaleali'ifano and Faumuina ended tragically as 11 Samoans died (including Tamasese) and 50 were injured. As a result, the Mau movement declared its objective of independence from New Zealand colonial rule (Meleisea, 1987). This day is recorded as Black Saturday for Samoans.

Until the end of the Second World War II different administrators succeeded, but Logan and Richardson surely remained as the less popular, exhibiting denial of Samoan culture and norms, discriminatory measures, and not permitting Samoans to voice their opinion in their own country. In 1945 when the war ended, the United Nations Organisation replaced the League of Nations and in October 1946, New Zealand was negotiating for Trusteeship of Samoa (Meleisea, 1987). In 1954 a Constitutional Convention was developed to engage discussion about the independence of Samoa. This was the first real effort to integrate

tradition within a constitutional framework.

#### *1.9.4 The independence of Samoa*

On the 1<sup>st</sup> of January 1962, Samoa gained independence. An adjusted Westminster system was developed. This new political system was framed on Samoan traditional socio-political organisation with government leaders being elected on the basis of existing social status and a parliamentary democracy constituted of matais elected by matai suffrage. Indeed, upon gaining constitutional independence, Samoans safeguarded the role of kinship and the function of matais both at local and national level within the new constitution (Macpherson, 1999). Following independence, there were two views on the future of Samoa; one labelled as 'conservative' and the other as 'progressive' (Kerslake, 2010). The former envisaged little change. The latter looked at gradually expanding the economy, mainly through the development of commercial agriculture, focusing on the land tenure system and universal suffrage. Cash economy was introduced to create supplies for national and international markets (Macpherson and Macpherson, 2009). This came as a replacement of a non-monetised economy based on subsistence farming and exchange of services. For Macpherson and Macpherson (2009), this more capitalistic model had little effect on the customary land system and social organisation. However, different authors suggest the introduction of the cash economy had negative effects for Samoan people. Farrel and Ward (1962) explained that traditional crops have declined or even disappeared. The authors noticed that in the 1950s and 1960s coconut groves were important for export, representing over half of the agricultural lands from many villages. Paulson (1993) noticed that during the same period, banana and cocoa trees were extensively planted for export. Campbell (1984) argued that that the shift from subsistence to cash-crop production increased vulnerability by focusing on a small number of 'moneymaking' crops rather than a diversity of crops associated with subsistence farming.

The same year that Samoa gained independence the Treaty of Friendship was

endorsed with New Zealand, which permitted (and still does) 1,100 Samoans to migrate each year to this country. In fact, Samoan emigration had started post World War II with New Zealand government promoting immigration from the Pacific region in order to address industrialisation needs and compensate labour shortage. Yet, the Treaty of Friendship accelerated the migration of Samoans to New Zealand, and while in 1966 there were 11,842 Samoans residing in New Zealand, this number rose by 87.4% in 1971 (Kerlake, 2010). During this time Samoans tended to live in crowded houses in inner-city suburbs of Auckland, sending remittances back home as much as they could (Meleisea, 1987). They then started to save money and could slowly buy their own house, cars and furniture. The mid 1970s saw the start of a recession in New Zealand, which placed some pressure on Samoan migrants. For example, the police and government officials were carrying out 'dawn raids' on Samoans' (and other Pacific islanders) houses, looking for illegal migrants. Identified illegal migrants were taken from their families and deported to Samoa.

Over the years, the situation of Samoan migrants in New Zealand improved. In 1987, Meleisea (1987:161) was writing "New Zealand has now become home to over one hundred thousand Samoans and this has strengthened the links between the two countries far more than was the case during the colonial period". Nowadays, more than half of the Samoan population lives overseas, mainly in New Zealand, but also in Australia, the US, and American Samoa. Samoan migrants send considerable remittances to their home communities. In 2013, official remittances represented 23.8% of Samoan GDP (World Bank, 2014). The World Bank ranks Samoa the seventh country worldwide and the first over the East Asia and Pacific regions in terms of remittances as share of GDP (World Bank, 2014).

#### *1.9.5 The 2009 tsunami and 2012 Cyclone Evan as case studies*

Over the last 25 years, Samoa experienced recurrent and severe disasters. The most devastating events during this time frame were Cyclone Ofa in 1990 and

cyclone Val in 1991. In 2004, the country was hit by the tropical cyclone Heta, which led to considerable damages. This thesis focuses on two recent events:

- The tsunami that hit Samoa on the 29<sup>th</sup> of September 2009. A total of 143 people were killed. More than 5,000 people were made homeless (about 860 households) over 51 villages. The physical damage was estimated to be about US\$85 million, representing 14% of the Samoan GDP. Notably, most of the socio-economic damage occurred in Upolu Island (GOS, 2010).
- Cyclone Evan that impacted Upolu Island in December 2012 (see Figure 1.1). The total estimated damage and loss amounted to US\$ 203.9 million, being the equivalent to about 28% of the Samoan GDP. Moreover, the impact of the cyclone was particularly severe on food production, since about 75% of Upolu's agricultural land was affected (GOS, 2013).

Figure 1.1: Housing damage following cyclone Evan

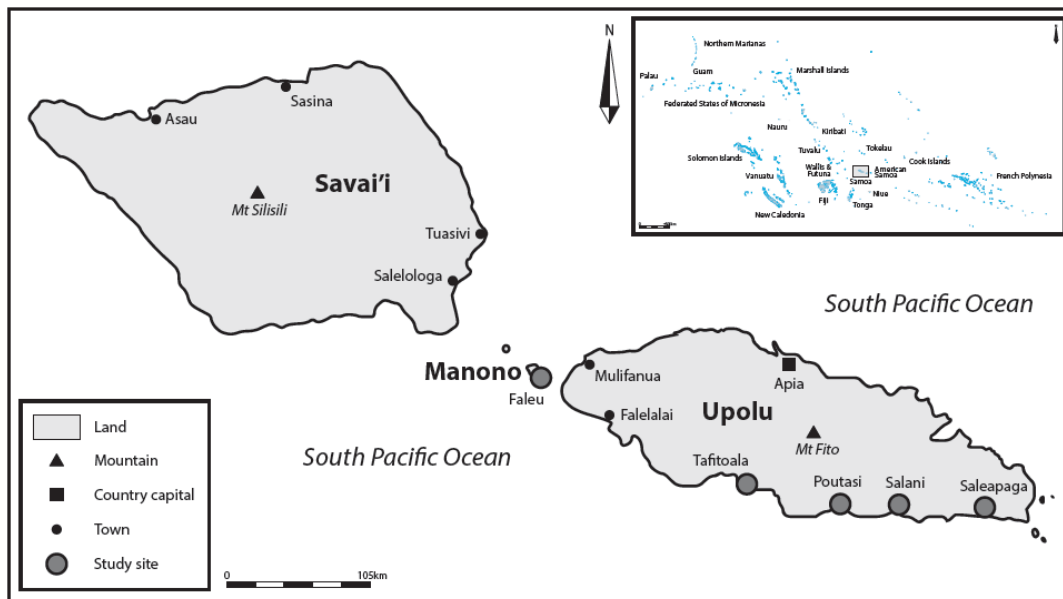


Source: Photo taken by the author, January 2013

### *1.9.6 Fieldwork in Samoa*

Fieldwork in Samoa took place between October 2012 and August 2013. It involved three separate stays of a total of four and a half months. This period followed three months of fieldwork done within the framework of the researcher's Masters degree done between 2010 and 2011. Conducting research in Samoan villages required respecting local procedures and cultural ethics. As indicated in section 1.9.4, while Samoa has a Western-style parliamentary system, the country is based on a chiefly (matai) political system that exists at village and national scales. Indeed, a prerequisite to undertaking research in disaster-affected villages involved getting approval from relevant ministries. The Ministry of Women, Community and Social Development (MWCSD) informed village chiefs that the research had been accepted at the national level. Village chiefs (pulenuu) then told the villagers that a research project would take place. This research also received support from the National Disaster Management Office (NDMO) who facilitated this process and helped in the selection of the study sites. Five coastal villages were designated, including Saleapaga, Poutasi, Salani, Tafitoala, and Faleu on Manono Island (see Figure 1.2). These villages are comparable in size, wealth, social and political organisation. Moreover, each of them was affected by the 2009 tsunami. Yet, some villages experienced severe damage and fatalities (e.g. Saleapaga and Poutasi), while others were less affected. Furthermore, between the first and second trip to Samoa, cyclone Evan hit the selected villages. This event was therefore used in the data collection process.

Figure 1.2: Study sites



From the beginning of January to the end of February 2013, a total of eighty-two semi-structured interviews were carried out with disaster-impacted households of these communities. All of them had been impacted by the 2009 tsunami and some of them had been affected by the 2012 cyclone Evan. An attempt was made to interview a comparable number of households in each community (see Table 1.2). In lower-scale affected villages such as Salani and Faleu this involved interviewing all the impacted-households within the village. In the other communities, interviews were carried out according to a random sampling method. In each village, one local was contracted as research assistant to identify those who had been affected, approach them, and help with the translation as most of the interviews were done in Samoan. Semi-structured interviews took place in people's house and lasted about 45 minutes. Involving locals in the interviewing process was indispensable since they knew who had relocated further inland, helped to develop a friendly atmosphere during the interviews, and were aware of potentially sensitive issues such as identifying people who had lost relatives in the events.

In parallel, interviews were carried out with government officials from the MWCSO, the NDMO, and the Seasonal Employment Unit (SEU), from financial institutions and money transfer agencies (e.g. Central Bank of Samoa, Western Union), international NGOs (e.g. Red Cross, Oxfam), and local NGOs including Women in Business Development Inc. (WIBDI) and Samoa Umbrella for Non-Government Organisations (SUNGO).

Table 1.2: number of households interviewed per village

<b>Villages</b>	<b>Households interviewed</b>
Faleu	15
Poutasi	15
Saleapaga	17
Salani	14
Tafitoala <sup>2</sup>	21

Between the end of May and beginning of August 2013, participatory activities were carried out with local communities and were limited to four villages, namely Saleapaga, Poutasi, Salani and Tafitoala. Participatory methods included timelines, carousel, wheel of resources, ranking, scoring as well as proportional piling (see Figure 1.3 and 1.4), and often a combination of these to gather qualitative and quantitative information (see chapter 3 and 4 for more details on the rationale and process of these tools). Carrying out participatory activities required building strong relationships with local communities. It implied living with community members by staying in their homes and taking part in some of the quotidian activities. Although such a process can be time consuming, the researcher had done research and multiple trips to Samoa before undertaking this thesis, staying in villages for weeks or even months. Thus, durable relationship had already been built with some locals, which considerably facilitated the research process.

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<sup>2</sup> In Tafitoala village, all 21 households interviewed were hit by cyclone Evan.

Figure 1.3: Wheel of resources in Poutasi village



Source: Photo taken by the author, July 2013

Figure 1.4: Timeline combined with scoring technique in Salani village



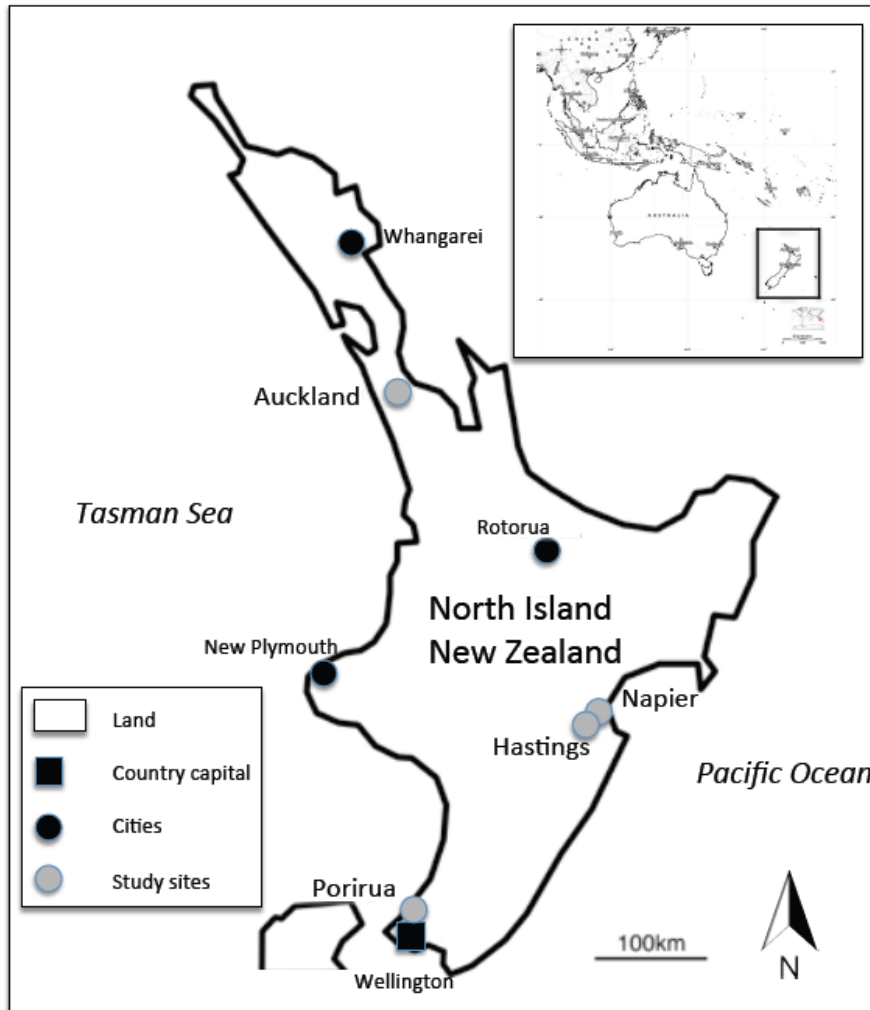
Source: Photo taken by the author, July 2013



### *1.9.7 Fieldwork in New Zealand*

Another part of this thesis research focused on Samoan migrants who remit. Thus, fieldwork took place in New Zealand where Samoan migrants constitute the largest Pacific ethnic group (48.7% of Pacific ethnic groups) (Statistics New Zealand, 2013). More than 144,000 Samoans live in this country, with 66.5% being located in Auckland. Fieldwork was undertaken from 2013 and 2014 with Samoan migrants who had family members affected by the 2009 tsunami. Research involved 12 semi-structured interviews, of which seven were done in Auckland, three in Napier and Hastings, and two in Samoa with migrants visiting their family (see Figure 1.5). All the interviewees were living in New Zealand for more than 10 years. The interviewees were approached through a snowballing method via different networks (e.g. community leaders, church pastors and Samoan schools). The composition of the interviewees was gender-balanced since seven are women and five are men. The semi-structured interviews lasted about 45 minutes and were done in English. They took place in people's houses or close to their working place.

Figure 1.5: Study sites in New Zealand



Participatory activities were then carried out in Porirua in March 2014 and in Auckland in October 2014. Thirteen participants were involved in the participatory activities, each of them representing his or her household. Participants were approached in the same way as that of the interviewees. Tools included timeline with proportional piling, impact diagram, and Venn diagram (see Figure 1.6). Moreover, Focus Group (FG) discussions followed every activity (see chapter 7 for more details).

Figure 1.6: Venn diagram done with Samoan migrants in Auckland



Source: Photo taken by the author, October 2014

### 1.10 Significance of the research

This thesis utilises a livelihood approach, which aims at integrating the view from remittances receivers and senders, including on more intangible aspects related to this practice. Moreover, it uses participatory methods (e.g. proportional piling, carousel, ranking, scoring, timeline, Venn diagram) to gather quantitative as well as qualitative data on remittances. This methodological approach to remittances is novel and has, to our knowledge, never been used previously. In addition, while the core focus on this thesis is on the receiving / disaster-affected area, the present research also explores remittances from the viewpoint of migrant' senders, whose perspectives are largely absent from the current literature (Lindley, 2008). Thus, the conceptual and methodological approaches of this thesis differ from the dominant approach to remittances in

disaster (see Table 1.3). As a result, the thesis provides original data and adds knowledge distinct from the existing body of research on remittances in disaster. Findings have implications for disaster research, including on the conceptual understanding of remittances and methodological approaches to remittances assessment. In addition, the results presented in this thesis are relevant at policy level and thus might contribute to DRR and DM goals.

Table 1.3: Dominant approach on remittances in disaster versus approach of this thesis

<b>Dominant approach on remittances in disaster</b>	<b>Approach adopted in this thesis</b>
Economic view	Livelihood approach
Focusing on remittances' recipients	Focusing on remittances' recipients and senders
Conventional methods (e.g. econometric methods, questionnaire-based survey)	Participatory tools and interviews
Short-term assessment	Long-term perspectives
National to global scale assessment	Household – local community level assessment linked with transnational scale
Focus on perceptible impacts of remittances	Investigating both tangible and intangible impacts of remittances

### **1.11 Thesis structure**

The choice has been made to write this thesis using the publication format. Since the livelihood approach is multi-disciplinary, an attempt was made to target scientific journals with different foci. Hence, publications include journals with an emphasis on disaster, migration, and development issues. Moreover, this thesis also tried to target bulletins that would most likely be read by

practitioners and policy makers. This is particularly important in the context of this thesis since it does not only try to provide new theoretical insight on remittances in disaster, but also attempts to provide practitioners with practical tools to better assess remittances. In addition, this thesis aims to deliver useful information to NGOs and governments who contribute to the development of policies targeting DRR and DM objectives.

The thesis contains seven scientific papers, which together form a comprehensive body of research (Table 1.4). Article one undertakes a review of the livelihood strategies that people use to reduce the risk of disasters, identifying the need for further understanding of remittances as a mechanism to cope with and recover from such events. The article points out that most research done on remittances has adopted short-term and economic approaches, thus producing limited knowledge on the role of this mechanism in the context of disaster. It concludes that a sustainable livelihood approach is required, one that is more cognisant of people's view, values and priorities.

This links to the second article, which provides a rationale for using participatory methods, rather than more conventional methodological approaches such as questionnaire-based surveys and econometric methods, and describes the tools utilised in this research to assess remittances.

The third paper critically examines the difficulties and limitations encountered when adopting a participatory approach with disaster-affected communities. It reflects upon such processes, and challenges the capacity of participatory disaster research, when carried out with an academic purpose, to generate its key principles of (a) empowering the powerless, (b) initiating changes at policy level, and (c) producing sustainable solutions that address the needs of local communities.

Article four investigates the importance, role and impacts of remittances in households' responses to disaster. Mainly focusing on the 2009 tsunami and to a lesser extent cyclone Evan, the paper indicates that those affected received

remittances very quickly during both events and that remittances remained high throughout the recovery phase. It is found that remittances are part of a livelihood system and interact with external aid since remittances increased when external aid was low and decreased when external aid was higher. People getting remittances were able to deal more easily with emergency issues and recovered more rapidly than those with no or reduced access to this resource.

The fifth paper complements the findings of the preceding article, investigating the relationship between remittances access, affluence and vulnerability pre- and post-disaster. Using cyclone Evan as a case study, the article shows that the poor get little to no remittances and that they struggled more than the rest of the community to cope with and recover from the event. Little access to remittances had negative implications on the security and sustainability of their livelihoods. The paper concludes that remittances reproduce or even increase the inequalities and vulnerabilities existing pre-disaster.

Article six focuses on remittances' senders, analysing the role of Samoan migrants living in New Zealand who helped their community of origin to cope with and recover from the 2009 tsunami. This paper studies the main elements shaping remittance's behaviour and examines the impacts that remitting had on them. This article brings new data to this field of research, the perspectives of remitters being generally under-researched. It also challenges some of the New Economics of Labour Migration's (NELM) theories, the foremost conceptual approach on remittances behaviour.

Article seven provides potential policy options to integrate remittances within existing disaster risk management practices.

Table 1.4: List of chapters / articles of this thesis<sup>3</sup>:

Article / Chapter	Title	Authors	Journal	Status
Article 1 / Chapter 2	Remittances and disaster: a review	Loic Le Dé Jean Christophe Gaillard Wardlow Friesen	International Journal of Disaster Risk Reduction	Published
Article 2 / Chapter 3	Using participatory tools to assess remittances in disaster	Loic Le Dé Jean Christophe Gaillard Wardlow Friesen	Humanitarian Exchange	In press
Article 3 / Chapter 4	Academics doing participatory disaster research: how participatory is it?	Loic Le Dé Jean Christophe Gaillard Wardlow Friesen	Environmental Hazards	Published
Article 4 / Chapter 5	Remittances in the face of disasters: A case study of rural Samoa	Loic Le Dé Jean Christophe Gaillard Wardlow Friesen Fagalua Matautia Smith	Environment, Development and Sustainability	Published
Article 5 / Chapter 6	Poverty and disasters: do remittances reproduce vulnerability?	Loic Le Dé Jean Christophe Gaillard Ward Friesen	Journal of Development Studies	Published
Article 6 / Chapter 7	Our family comes first: migrants' perspectives on remittances in disaster	Loic Le Dé Jean Christophe Gaillard Wardlow Friesen Meressa Pupualii Cilla Brown Angela Aupito	Migration and Development	Published
Article 7 / Chapter 8	Remittances and disaster: Policy implications for disaster risk management	Loic Le Dé Jean Christophe Gaillard Wardlow Friesen	International Migration Journal, International Organization for Migration (IOM)	Published

<sup>3</sup> The content of every article remains as published or accepted for publication by the journals and has not been modified in any way. However, articles have been formatted for consistency of the thesis.

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## Chapter 2 Remittances and disaster: a review

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Le Dé L., Gaillard J. C. and Friesen W. (2013). Remittances and disaster: A review. *International Journal of Disaster Risk Reduction*, 4(1):34–43.

### Abstract

Over the last few decades remittances sent to the least wealthy countries have been considerably augmented. In most Small Island Developing States (SIDS), remittances are important in sustaining people's daily livelihood. Moreover, there is growing evidence that remittances intensify significantly during crisis events, thus representing a powerful and reactive mechanism in time of hardship. However, the short-term and economic approach to remittances of most research has produced limited knowledge regarding the role of this practice in time of disaster. This paper identifies the need for further understanding of this mechanism to better inform policies geared toward disaster risk reduction. The focus is on Pacific Island Countries (PICs), where remittances and risks of disasters are elevated. This paper suggests that remittances can be both a weakness created within the vulnerability context and a strength that enables people to cope with and recover from shocks. Understanding both aspects implies appraising the function of remittances in people's day-to-day livelihood and comprehending the tangible and more intangible reasons for this mechanism to perform in the face of natural hazards. Hence, it is argued that a sustainable livelihood approach is essential, one that is more cognisant of people's perception, values and priorities. This paper concludes that building on this coping mechanism would help in achieving goals of vulnerability reduction to disasters.

Keywords: Disaster – remittances – vulnerability – sustainable livelihood

## 2.1 Introduction

The rising occurrence of disasters and their related impact has become a growing concern for the international community (UN/ISDR, 2005). Less affluent countries are usually identified as the most vulnerable to disasters, with particular attention given to Small Island Developing States (SIDS). While SIDS differ greatly in terms of their geographical location, biophysical characteristics, socio-economic models, cultural practices and political systems, they share a common vulnerability to disasters and face similar challenges of sustainable development. International organisations and academics usually point out their high level of exposure to natural hazards (e.g. cyclones, tsunamis, flooding), intrinsic factors of vulnerability (e.g. remoteness, limited access to resources, small populations, dependence on external trade), and limited economic and technical coping capacities (e.g. lack of insurance, limited weather forecasting systems) (Bettencourt, 2006; Briguglio, 1995; Kelman and Lewis, 2005; Lewis, 2009). Accordingly, the international community has made explicit commitments toward assisting SIDS with vulnerability reduction. Although vulnerability has become a core concept used by most agencies involved in disaster response, their understanding of and approach to vulnerability often diverge. Vulnerability relates to the “susceptibility to suffer damage in a potentially dangerous event” (Gaillard, 2010: 219). Vulnerability accrues from components of a society that make a hazard occurrence a crisis or disaster (Bankoff, 2001; Cannon, 1994). Also, a differentiation between physical and social vulnerability is usually made. While the former comes from an approach based on exposure to environmental stresses and focus on hazard assessments and related impacts, the latter refers to the structural elements shaping human society and to the capacity of individuals and communities to respond to a hazard occurrence (Wisner et al., 2004; Wisner et al., 2012). The literature investigating natural hazard-related disasters has largely focused on geophysical and biophysical aspects of risk such as floods (Chowdhury, 2000; Plate, 2002), landslides (Clerici et al., 2002; Harp et al., 2009) and volcanoes (Gomez-Fernandez, 2000; Pareschi et al., 2000), thus disregarding the socio-cultural, historical and political components of disasters. As a consequence, Eriksen et al. (2005) argue that our ability to measure physical

characteristics of environmental changes is much more advanced than our understanding of the root causes of disaster and the varied mechanisms developed by people to cope with them. For the last few years, this approach has been reinforced by the central role given to climate change in disaster occurrence (Gaillard et al., 2007; Manzo, 2009). Although being a recent trend, this approach is particularly evident for SIDS since they have almost become “an icon in climate change” (Barnett and Campbell, 2010: 2). While this ‘new impulse’ to hazard studies has allowed valuable scientific progress in terms of weather forecasting and GIS mapping, such a view has largely tended to pinpoint nature as the main cause of disasters (Gaillard et al., 2007), rather than human–environment relationships (Wisner et al., 2004). This has resulted in highly technical responses to Disaster Risk Reduction (DRR), generally including engineering improvements, upgrading of building codes and norms, and development of insurance systems (Freeman, 2003; Gurenko and Lester, 2003; Gurenko, 2004).

This dominant approach of DRR, based on a ‘top-down’ policy learning transfer from Western countries to the developing nations, has frequently led to unsuccessful or even counterproductive outcomes (Bankoff, 2001; Haque and Etkin, 2007). The failure of this approach largely lies in two key elements; the first one relates to the lack of understanding of the real causes of disasters (Gaillard et al., 2009). Although academics, organisations, institutions and the media frequently use superlatives to emphasise the ‘extreme’ dimension of disasters and the limited technical capacities of those impacted (e.g. ‘extraordinary’, ‘under-developed’, ‘un-prepared’, ‘un-planned’), the root causes of disasters largely originate in the “ordinary, everyday functioning of society” (Gaillard et al., 2009: 119; Hewitt, 1983). Natural hazards impact individuals and communities differently depending on their pre-existing level of vulnerability (Cannon, 1994; Wisner et al., 2004). Moreover, people’s vulnerability and coping capacities are strongly linked to their entitlement to access and use livelihood resources, and are the product of historical, cultural, and socio-economic processes that constitute the root causes of disaster (Oliver-Smith, 1996). Thus, individuals and communities are vulnerable geographically because they live in risky places (e.g. coastal zones, floodplains, seismic area), which may come from

their lack of land access, and are vulnerable economically because they are poor, and thus have limited savings to face crisis events. Likewise, people are vulnerable socially because they are part of minority groups, have limited access to health insurance, or have weak social networks, and politically because their voice is not considered by political instances (Gaillard and Cadag, 2009; Gaillard et al., 2009; Wisner et al., 2004).

Secondly, most aid agencies tend to neglect people's experience of disaster and the different strategies they use to cope with and respond to disasters within the recovery process (Bankoff, 2001; Heijmans, 2004; Mercer et al., 2007). Reflecting on her work in Indonesia and in the Philippines, Annelies Heijmans (2004) explains that whilst those affected see hazard-related disasters as part of their 'normal life', aid agencies generally perceive and treat local people as 'in need and crisis', being impacted by events that happen beyond their control. However, individuals and communities have always developed abilities to learn and adjust, using different skills and sources of knowledge, self-organising and involving social networks and institutional linkages, and thus proving to be resilient in the face of disasters (Haque and Etkin, 2007; Shaw et al., 2009). Thus, varied academics and practitioners state that a better understanding of people's coping mechanisms is required, and that strengthening these strategies during the reconstruction process may contribute to achieve goals of vulnerability reduction (Buckle, 2006; Mercer et al., 2007).

Coping capacities and the different strategies used to face natural hazards are usually rooted in people's everyday livelihoods (Gaillard et al., 2009). Thus, in their struggle to deal with degrading conditions, livelihood insecurity and disasters, poor people have always used livelihood diversification strategies (Scoones, 1998). Livelihood diversification is "the process by which families create an assorted portfolio of activities and social support capabilities to meet daily needs and improve their standards of living" (Ellis, 1998: 4). Although for many households living in the least wealthy countries, diversification of incomes and activities is the norm (Barrett et al., 2001), and remittances have been often shown to be a crucial element of this strategy (Hussein et al., 1998; Lindley, 2006;

Monsutti, 2008; Orozco, 2006). In its simplest definition, remittances are “flows of resources, generally gifts and income, between migrants and their sending areas” (Adger et al., 2002: 4). During the last thirty years remittances sent to the least wealthy countries of the world have considerably increased (Vargas-Lundius et al., 2008). In recent years, the recorded flows of remittances worldwide have been almost three times greater than the US\$ 133.5 billion of international aid annually directed to developing countries<sup>4</sup>. This mechanism is particularly important in SIDS, including the Pacific region (Amuedo-Dorantes et al., 2010; Attzs, 2008; Jackman et al., 2009), being about two times greater than in other countries (Amuedo-Dorantes et al., 2007). In most Polynesian countries, remittances frequently constitute the principal source of income of the rural populations (Carrier and Unit, 1984; Chambers and Chambers, 2001; Felgentreff, 1996; Hayes, 1993; James, 1991; Marsters et al., 2006).

While often necessary for the most vulnerable in sustaining their livelihood on a day-to-day basis, various studies increasingly indicate that remittances may also represent a powerful and reactive mechanism in the face of disaster events (Deshingkar and Aheeyar, 2006; Mohapatra et al., 2009; Orozco, 2006; Ratha and Sirkeci, 2010; Yang and Choi, 2007). For example, in the Philippines, remittances helped to compensate for about 65% of the income losses resulting from rainfall-related disaster (Yang and Choi, 2007). In addition, when a political coup occurred in Fiji in 2000, remittances increased by 43% (Prakash, 2009). During the past decade multilateral agencies such as the World Bank, the Asian Development Bank and the Inter-American Development Bank have initiated projects aimed at appraising the importance of this phenomenon. Nevertheless, the very short-term and economic approach of existing studies has produced limited knowledge on remittances in time of disaster and the related implications in terms of humanitarian assistance and DRR policy.

Henceforth, this paper aims to explore the potential of remittances as a coping mechanism in the face of disaster. The focus is on PICs, as both remitting

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<sup>4</sup> See: Love P: Development aid drops for the first time in 15 years. OECD INSIGHTS Debate the issues, 4 April 2012. Available from: <http://oecdinsights.org/2012/04/04/development-aid-drops-for-the-first-time-in-15-years/>

practices and vulnerability to natural hazards are particularly high. The following section briefly reviews the concept of livelihood and the central role of diversification strategies as people struggle to make a living. Section three examines how remittances take place and the role that they play within people's livelihood diversification, with a particular emphasis on PICs. Sections four and five analyse the current knowledge of remittances in the face of disaster and further discusses the potential and approach needed for including this coping mechanism within disaster response and vulnerability reduction policies.

## **2.2 Sustainable livelihood and livelihood diversification strategies**

In their struggle to make a living people have always developed abilities to adapt to political, economic and environmental changes and shocks, by using different skills, knowledge and resources. Alternative to the somehow simplistic concept of employment, the concept of livelihood has been useful to portray the different ways by which people meet their needs on a daily basis (Bebbington, 1999). The concept refers to people's means and capacities to meet their consumption and economic needs, coping with uncertainties, and responding to new opportunities, by using a portfolio of tangible (resources and stores) and intangible (claims and access) assets (Chambers and Conway, 1992). Moreover, "A livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation" (Chambers and Conway, 1992: 6). Thus, people's ability to sustain livelihood or expand their assets depends on their access to productive resources and their capability to control and use them efficiently (Berry, 1989). Claims are the rights and capacity to ask for external support and are based on rights, moral obligation, and power relationships. These involve people's social, economic and political networks such as relatives, neighbours, social groups, governments, international organisations and NGOs (Scoones, 1998). Furthermore, access is the opportunity to utilise available resources and stores, or to get food, employment, information and technology (Chambers and Conway, 1992).

The extent, strength, and diversity of people's resources guide their capacity to both meet their daily needs and face environmental hazards (Gaillard and Cadag, 2009). The Department for International Development (1999) distinguishes five core resources or capital ('capital' being used to better communicate the concept of livelihood to economists) owned by people, including human, natural, social, financial and physical resources. Gaillard and Cadag (2009: 200) further identify the importance of institutional or political capital, being "the interface with formal governance and access to government-linked services, information, and overall to the larger political scene". In order to better prepare for, cope with, and recover from, shocks, stresses, market imperfections and seasonality, people generally diversify their resources, incomes and activities (Scoones, 1998). Livelihood diversification is present in a number of academic literatures, including those related to rural poverty (Ellis, 2000), households coping strategies (Adams et al., 1998; Davies, 1996), household risk management strategies (Carter, 1997; Valdivia et al., 1996), migration (Brown and Jimenez, 2008; Stark, 1991), and livelihood security and social protection (Devereux, 2001). Relevant to the context of vulnerability and disaster, the literature often differentiates ex-ante risk management strategies and ex-post coping mechanisms.

Ex-ante risk management relates to the risk reduction strategies used by households to limit the possibility of losses. Hence, ex-ante livelihood diversification is often seen as a planned risk strategy by which people try to prepare for a crisis situation and thus is generally compared to a 'self-insurance' allowing them to better cope with and recover (Barrett et al., 2001). Although livelihood diversification is not synonymous with income diversification (Ellis, 1998), most of the studies analysing ex-ante risk management strategies focus on the various types of income owned by households (Adams and He, 1995). They usually identify wages, labour payment in kind, self-employment outside agriculture, livestock income, crop income, rental income, domestic and international remittances as the diverse sources of income utilised by households. These income sources are sometimes classified in more aggregated form under farm income and non-farm income, or on-farm and off-farm income

(Barret and Reardon, 2000). Nevertheless, diversification strategies are not restricted to rural areas. Expanding cities where employment opportunities are increasingly scarce often means that the urban inhabitants are without a permanent job or have a low salary, thus encouraging them to diversify their sources of income. People may engage in non-permanent or casual jobs (e.g. carpentry and masonry assistant), and informal activities (e.g. petty trading, selling food and drink, crafts, collecting and trading second-hand objects) together with other sources of revenue such as pensions and remittances (Tolossa, 2010).

On the other hand, ex-post coping strategies refer to the means by which households try to mitigate the consequences of losses from a crisis event (Valdivia et al., 1996). Disasters are amplifiers of everyday hardship (Maskrey, 1989), thus people's ex-post coping mechanisms generally take place within their existing structures and networks (Eriksen et al., 2005; Pelling et al., 2004). Different studies show that coping strategies are usually adjustments of people's day-to-day activities, usually involving consumption modifications (Carter, 1997; Valdivia et al., 1996). For example, in a study done in Philippines, Gaillard et al. (2009) observe the different coping strategies used by coastal populations to face natural hazards. Adapting measures include reducing daily expenses, changing diet, saving food and money to prepare for the rainy season, or asking for postponement in repaying existing loans. Working on problems of famines, Sen (1991) was one of the first scholars to identify that notions of ownership and the various legal channels of acquisition are determinant factors influencing coping strategy models, social welfare and social security. Hence, the ability to cope with environmental hazards varies among individuals and groups. It depends on the efficiency of ex-ante risk management strategies (Corbett, 1988; Davies and Hossain, 1997) and it is linked to access to resources and people's capability to control and use them efficiently (Berry, 1989).

In time of crisis people may have to mobilise their resources and use the institutional environment, as well as their political influence and kinship networks. This may imply spending their savings, selling assets, reallocating



labour, claiming loans and gifts from relatives and/or patrons, and asking for government support (Adams et al., 1998; Ellis, 1998; Gaillard and Cadag, 2009). Coping strategies are allegedly 'successful' if the household can mobilise enough resources "to overcome adversity without endangering long-term objectives such as livelihood security" (Corbett, 1988: 265). It implies the ability to recover and reduce vulnerability, which is strongly linked to the positive dimension of social sustainability defined by Chambers and Conway (1992: 10) as "enhancing and exercising capabilities in adapting to, exploiting and creating change, and in assuring continuity". Nevertheless, livelihood strategies may 'fail' to cope with shocks and stresses when "both short and long-term objectives are sacrificed in the struggle for survival" (Corbett, 1988: 265). These may comprise skipping meals, consumption of wild food, ending of schooling for children, begging, and forced displacement (Corbett, 1988; Sogge, 1994). For example, when studying the different coping strategies used in wartime, Le Billon (2000: 13-14) explains that people may fall back on subsistence farming; participate in the informal economy; obtain humanitarian relief; and resort to violence. In addition, 'unsuccessful' coping strategies may oblige people to enter into activities that are labelled as illegal and/or undesirable by other segments of the population, such as petty theft and armed robbery, selling drugs and firearms, prostitution, abandoning children to orphanages, and selling organs (Sogge, 1994; Tolossa, 2010).

People's livelihood strategies depend on the constraints under which the decision-making takes place and the power relations at play (Bebbington, 1999; Francis, 2002). Indeed, feasibility (e.g. returns on risk, inequalities in resource endowments), opportunities and limitations (e.g. economic structures, labour), and social relations (e.g. discrimination, power relationship, norms) are all important factors guiding successful adaptation and thus, sustainable livelihood (Ellis, 1998; Start and Johnson, 2004). For both ex-ante and ex-post livelihood diversification strategies, people may pursue different goals determined by their level of vulnerability and their success to cope with and adapt to economic, political and environmental changes. Indeed, Adams et al. (1998) differentiate short- and long-term objectives for livelihood diversification. Food consumption

and health are immediate goals directly linked to basic needs. Long-term coping objectives relate to the “reinforcement of assets, incomes and social position to maximise future claims on resources” (Adams et al., 1998: 265). Desired effects of diversification strategy may include (1) income accumulation and increase of economically sustainable livelihood, (2) reduction of vulnerability to external shocks and stresses, (3) increase of well-being including self-esteem, sense of inclusion, and maintenance of cultural heritage, (4) food security, and (5) more sustainable use of natural resources (Ashley et al., 1999). Livelihood strategies involve the management of a livelihood portfolio and imply both the combinations of, and trade-offs between, different resources (Scoones, 1998). Nevertheless, depending on how these resources interact, livelihood outcomes may be undesirable, such as when they engender impoverishment, lead to persisting food insecurity, and/or overcome “social taboos and personal pride” (Sogge, 1994: 102). Thus, a livelihood diversification strategy refers to notions of livelihood adaptation, which can be successful when it results from deliberate choice, is reversible and strengthens security or even leads to wealth (Hussein et al., 1998) and negative when it fails to reduce vulnerability (Davies, 1996).

### **2.3 Transnational social networks and use of remittances in PICs**

Although the capacity to obtain and use resources is a key component for households to sustain their livelihood, remittances appear as an important component of livelihood diversification (Berry, 1989; Davies and Hossain, 1997; Ellis, 1998; Hussein et al., 1998; Valdivia et al., 1996). People utilise remittances as they lack access to resources and because of the failures of formal society, including limited work opportunities, imperfections in private credit, and/or incomplete insurance markets (Calero et al., 2009; Carter, 1997; Devereux, 2001). Hence, those with weak entitlement to resources use their social networks to facilitate and sustain their different income portfolios (Devereux, 2001; Ellis, 1998).

Social networks are the sine qua non condition for remittances to take place and often result from historical processes. Thus, in the case of PICs, the adoption of neo-liberal economic policies initiated in the early 1980s as well as migration schemes responding to the demand for 'low-cost' labour have resulted in expanding transnational social networks. More than thirty years ago, Walsh (1982: 7) noted that for PIC populations, migration was often seen "as an almost inevitable decision that they will have to make sooner or later". Today, large diasporas of Pacific islanders are observed in cities such as Auckland, Honolulu, New York, Miami, Los Angeles, and Sydney (Barnett and Webber, 2010; Connell, 2010). For example, in 2001 there were 176,710 Samoans living in Samoa and more than 233,000 living in New Zealand, Australia and the United States (US), meaning that about 57% of the global Samoan population resided overseas (Stahl et al., 2007). For the same period, Tonga had 46% of its population living overseas, Cook Islands almost 76% and Niue about 92% (Stahl et al., 2007). Thus, nowadays Connell (2010) affirms that the life course of Pacific islanders, whether they are present or absent, is embedded in international ties, where migration and remittances play an important role in their livelihood. Although these social networks are well established they are very dynamic (Stahl et al., 2007). Indeed, migration patterns vary from long-term migration with intention to come back, seasonal migration, to permanent out-migration, and may be forced or voluntary, thus guiding different kinds of remittances. Such migration-remittances configurations depend on the opportunities and constraints or 'pull' and 'push' factors that people are exposed to. These may include lack of employment, level of skills, family obligations and cultural norms, global economic changes, and policies implemented by host countries. In addition, it might result from slow-onset of deteriorating economic, political and environmental conditions and/or occurrence of shocks such as disasters (Brown and Jimenez, 2008; Morton, 1998; Stahl et al., 2007).

Over the Pacific region, remittances represent one of the most prominent components of national incomes, leading Connell and Brown (2005: VII) to affirm that remittance proportions "reach levels rarely found elsewhere in the world". In rural areas, remittances often constitute a significant source of income,

thus playing a meaningful role in maintaining households (Carrier and Unit, 1984; Chambers and Chambers, 2000; Felgentreff, 1996; Hayes, 1993; James, 1991; Marsters et al., 2006). Different studies in Tonga during the 1980s and 1990s found that remittances represented anywhere between 15% and over 50% of the income of various villages (Evans, 2001; Faeamani, 1995; Hardaker et al., 1987). The importance of remittances in the Pacific region is not new, and has been the subject of many debates and theories regarding the motivation for such behaviour, including altruism, self-interest and a mix of both, qualified as implicit family agreement (Connell and Conway, 2000; Poirine, 1998; Poirine, 2006; Rapoport and Docquier, 2006; Stark, 1991). In the mid 1980's the MIRAB (Migration, Remittances, Aid, and Bureaucracy) model emerged (Bertram and Watters, 1986) to portray the economic functioning of this region and to further propose development opportunities. 'Partisans' of the MIRAB model state that migration and remittances is a consciously planned strategy where families prioritise investment in the future migrants' education rather than in fishing ventures, business and farming (Poirine, 1998; Poirine, 2006). Also, remittances have been described as an efficient family savings and loan strategy that enables the 'transnational corporation of kin' to get the highest returns on social capital investments (Bertram and Watters, 1986). Derived from the utility models (e.g. Becker, 1965), the MIRAB approach implies that choices of resources allocation are based on the single motivation of maximisation, and assume complete rationality and power of decision of households to design 'economic strategies'. This neo-classical economic approach perceives society as a combination of individuals that are both producers and consumers, and whose decisions and actions are based on the optimisation of these functions. Hence, this view is quite reflective from an era when development studies were dominated by the 'imperialism of economics' (Fine, 2002).

Nonetheless, a more 'moral economic' approach has vigorously criticised some aspects of the MIRAB model, particularly because it tends to be reductionist and attributes economic motives and outcomes in determining households' decision to use remittances. This contrasting view claims that the MIRAB model is lacking in capturing the kinship-based aspect of the remittances practice which is

embedded in a socio-cultural context very singular to PICs (Marsters et al., 2006). Remittances also include gifts, donations to institutions and churches, and different channels are used such as migrants visiting relatives (Amuedo-Dorantes et al., 2010; Brown and Ahlburg, 1999). While for some economists and international institutions (e.g. World Bank, International Monetary Fund), unrecorded remittances represent a 'hidden economy', for others it is a way to "secure a remittance culture that expresses an identity and supports its reproduction as well as the maintenance of various social and economic relations – from property rights to welfare regimes" (Marsters et al., 2006: 41-42). Eventually, kinship and gifts are fundamental aspects of most societies in the Pacific Islands (Macpherson, 1999; Thornton et al., 2010). Hence, for some academics the neo-classical economic perspective may lack in considering the intangible components associated with the practice of remittances, leading Hau'ofa (1993: 13) to declare that "Economists do not take account of the social centrality of the ancient practice of reciprocity, the core of all Oceanic cultures".

In the Pacific region, rather than becoming savings, remittances are often used to meet households' consumption needs, including food, clothing and health care (Connell and Conway, 2000). They are also spent on housing construction, education, agriculture, and small business investments such as stores and transport businesses; these characteristics are similar to studies done elsewhere such as Pakistan and Sri Lanka (Deshingkar and Aheeyar, 2006; Suleri and Savage, 2006). Nevertheless, a particularity of the Pacific region certainly lies in the amount allocated for social and cultural use, including weddings, funerals and other ceremonies (Borovnik, 2006; Thornton et al., 2010). In addition, remittances are used to support local sporting clubs, social organisations, women's groups, and local development projects, which point out the broader social benefits related to this practice. As an illustration, a study by Walker and Brown (1995) concludes that for 79% of Tongan and 63% of Samoan households, 'socio-cultural uses' were considered the foremost utilisation of remittances. Also, it is predominantly via this socio-cultural spending that migrants affirm their continuous commitment to their home place. While these aspects are hardly quantifiable, most of the literature on remittances and migration, by focusing on

more 'visible' economic effects of this practice, has largely disregarded their considerable social implication (Brown and Ahlburg, 1999).

#### **2.4 Remittances in the face of disasters**

Although remittances are often central to the livelihood of the most vulnerable, some evidence indicates the significant role of remittances in time of disasters. On the global scale, while the number of migrants worldwide was increased by 42% between 2000 and 2010, inward remittance flows to developing countries were augmented by 300% for the same period, reaching US\$ 325.5 billion in 2010 (World Bank, 2010). According to some academics, this considerable increase in remittance flows comes from improvements of telecommunications and transports systems that largely facilitate this practice (Connell and Brown, 2005). For others, this trend can be explained by the rising number of people affected by disasters worldwide (Amuedo-Dorantes et al., 2007). Indeed, varied studies conclude that remittances intensify noticeably during economic crisis, political conflicts and catastrophic events (Ratha and Sirkeci, 2010; Wu, 2006). For example, during the agricultural shocks of 1999 and 2001 in El Salvador, remittances were augmented by 40% to 60% (Halliday, 2006). Unlike foreign investment, remittances tend to be countercyclical, acting therefore as a safety net for households that have migrants abroad (Deshingkar and Aheeyar, 2006; Mohapatra et al., 2009). Moreover, the constancy and reliability of remittance transfers seem to play an important role in 'consumption smoothing' (Ratha, 2006). While other sources of incomes and activities may be irregular and unpredictable, remittances permit the affected households to absorb shocks, allowing them to face unanticipated expenses (Suleri and Savage, 2006), thus leading some academics and organisations to compare remittances with self-insurance (Orozco, 2006; Ratha and Sirkeci, 2010). On a broader scale, remittances seem to also contribute to the wider community. The flow of money and goods may accelerate the reestablishment of local markets, provide employment related to housing reconstruction, and engender other multiplier effects beneficial to the local economy (Suleri and Savage, 2006).

There is therefore, among academics and multilateral agencies, a growing consensus that remittances may be a powerful ex-post mechanism for households to cope with and recover from disasters (Mohapatra et al., 2009; Ponce et al., 2008; Yang and Choi, 2007). Although few empirical studies have explored the role of remittances in disaster emergency and recovery (Mohapatra et al., 2009), there are some indications that migrants react faster than international aid to assist their relatives (Deshingkar and Aheeyar, 2006). For example, Deshingkar and Aheeyar (2006) explain that after the tsunami of 2004, the velocity at which Sri Lankan migrants assisted their families was of particular importance since government support did not arrive during the first month of crisis. Similarly, following the tsunami of 2004, Wu (2006) finds that remittance-recipients in Aceh, Indonesia, recovered more quickly because of rapid relief from migrant remitters. However, in both studies the disruption of the banking systems was an issue, as most remittance-receivers could not get access to the money sent. Isolated villages suffered the most from this disruption, as the delays for infrastructure recovery were longer. In that case, informal remittances that are not recorded in the traditional banking system, such as hand-carrying and posted money, proved to be efficient and with minimal delays (Deshingkar and Aheeyar, 2006; Wu, 2006).

After an earthquake hit northern Pakistan in 2005, the households for whom remittances were part of their daily livelihoods proved to be less vulnerable (Suleri and Savage, 2006). Remittance-recipients were able to repair and rebuild their houses more easily than those without access to this mechanism. Furthermore, the study concludes that remittances allowed receivers to get access to other resources such as healthcare or distribution points for relief aid (Suleri and Savage, 2006). Hence, remittances-receivers proved to be more resilient, while in some cases non-recipients of remittances had to sell their assets to pay for healthcare (Suleri and Savage, 2006). On the other hand, Wu (2006) notices that within the first few months following the 2004 tsunami, Acehnese who relied on remittances for their daily livelihoods were as equally affected as non-remittance receivers. For the households relying the most on

remittances, the principal source of livelihood was disrupted, and thus they were not able to meet their everyday consumption needs (Wu, 2006). This case certainly points out issues related to a high dependence on remittances as part of livelihood diversification strategy and how it may shape vulnerability. It also stresses the need for policy makers to, in time of crisis, find ways to facilitate the networks by which remittances take place to assist those most at risk.

## **2.5 Remittances in time of disaster: toward a sustainable livelihood approach**

Even though aid agencies are aware of the importance of remittances, their knowledge about this mechanism is limited, which makes it difficult for them to comprehend the implications in terms of disaster response and risk reduction policies (Suleri and Savage, 2006). Some argue that little effort has been made to understand remittances in the face of environmental hazards, as agencies involved in disaster management tend to minimise the potential of this coping mechanism (Deshingkar and Aheeyar, 2006). Moreover, most existing studies have been very economic and short-term in their approach. Much research utilises econometric methods to estimate the significance of remittances in time of catastrophe (i.e. Amuedo-Dorantes et al., 2007; Ponce et al., 2008; Valdivia et al., 1996; Yang and Choi, 2007). While providing interesting information on the magnitude of financial fluctuations as well as their reactivity following a crisis event, this approach does not include people's perception on this practice nor the meaning that remittances have to them. Somehow by reproducing the utilitarian models approach such as the one used for MIRAB, these economic methods say little about who has access to remittances, why this mechanism takes place and if and how remittances help households and communities to recover from disasters.

Moreover, the few empirical studies assessing the use of remittances in time of crisis have mainly focused on short-term responses and technical difficulties faced by people. This approach has resulted in technical recommendations for



policy improvements such as restoring the disrupted financial infrastructure, reducing the high fees that apply on small monetary transactions, tracing families in order to allow the remittances practice to take place, and facilitating informal remittances (Deshingkar and Aheeyar, 2006; Mohapatra et al., 2009; Ratha, 2006; Suleri and Savage, 2006; Wu, 2006). Of course, these are important elements that aid agencies and governments need to consider within the immediate relief effort. However, in their study in Pakistan, Suleri and Savage (2006: 3) explain that “The role of remittances in people’s livelihoods in ‘normal’ times – let alone in emergencies – is not well understood, and it is not surprising that, while they were aware of the importance of domestic and international remittances, relief actors found it difficult to assess the implications for their programming of relief and recovery assistance”. Indeed, understanding the role of remittances in shaping people’s vulnerability and response to disasters implies appraising the role that remittances play on a daily basis in people’s livelihood, how this practice behaves in time of crisis, and whether or not it contributes to successful livelihood adaptation. Following a disaster, remittances may be spent on basic needs including food, clothes, emergency health, and funerals, or directed to longer-term objectives such as education, business investment, migration with intention to remit, and housing reconstruction. Depending on the livelihood strategy adopted, households may increase already pre-existing vulnerability and enter into irreversible livelihood strategies or rather strengthen their resources and assets, thus increasing chances of more sustainable livelihood (Lindley, 2007; Wu, 2006). Moreover, migration-remittance patterns may be re-enforced or even created. These patterns are sometimes characterised by particular segments of the population, such as the seafarers from Kiribati, usually men, working on international merchant and fishing boats (Borovnik, 2006), or the Indigenous-Fijians employed in the security industry in the Middle East (Brown and Jimenez, 2008). Such strategies may to some extent be forced or deliberate, and have an impact on the livelihood options and choices of family members left back home (Borovnik, 2006; Lindley, 2006). Likewise, migration-remittance strategies may affect the livelihood of the senders (Lindley, 2006). Remitters might have to work longer hours, be separated from the family for a large period of time, use their

savings or even contract loans to support their relatives in time of disaster, thus potentially increasing their vulnerability.

Understanding people's livelihood strategies and the role of remittances in achieving particular livelihood outcomes would contribute to improve aid assistance and DRR planning before disasters occur. Insights into people's livelihood patterns provide information on their vulnerability and whether the means of protection they apply are desirable, adequate and sustainable (as assessed by people themselves). Nevertheless, a major concern remains that most aid agencies hardly take efforts to comprehend people's livelihoods before designing interventions, but rather assume what people need (Heijmans, 2001; Heijmans, 2004). Consequently, some academics and organisations argue that understanding people's livelihood strategies and their diverse coping actions necessitates the adoption of a sustainable livelihood approach that is more cognisant of people's perceptions, priorities and values as well as of the often severe constraints they are exposed to (Chambers and Conway, 1992; Gaillard et al., 2009; Pender, 2004; Scoones, 2009). Emerging from the concept of sustainable livelihood, the sustainable livelihood approach is largely utilised by governments and aid agencies to foster development (Chambers and Conway, 1992; Scoones, 2009). A sustainable livelihood method generally seeks to analyse individuals and communities' strengths rather than their needs, and tries "to build on everyone's inherent potential" (Scoones, 2009: 180). Accordingly, this approach is meant to be 'people-centred' in order to guide policies that should "be based on understanding the realities of struggle of poor people themselves" (Scoones, 2009: 180). In this optic, Chambers (1997) claims that an analysis of livelihood strategies should allow people to delineate criteria outcomes that they perceive as important. Indeed, the sustainable livelihood approach promotes the participation and involvement of local people in making decisions for their future (Comfort et al., 1999). This implies a 'bottom-up' perspective to development, involving the use of participatory techniques, and thus radically shifting away from the dominant 'top-down' approach utilised in disaster management (Wisner et al., 2004). Indeed, Community-Based Disaster Risk Reduction (CBDRR) programmes are efficient in strengthening communities' coping capacity and thus

in achieving vulnerability reduction and development goals (Allen, 2003; Allen, 2006; Gaillard and Maceda, 2009; Yodmani and Center, 2001). CBDRR seeks to empower vulnerable communities via self-development of ways to deal with shocks and crisis, which together with culturally adapted practices fits with their needs and priorities.

Furthermore, the sustainable livelihood approach aims at assessing people's strengths and weaknesses, as well as the diverse opportunities and threats under diverse social, economic and political conditions (Chambers, 1997; Scoones, 1998). Henceforth, a sustainable livelihood approach to remittances in disaster should explore the processes and intangible elements influencing the use of this practice in the face of crisis. Moreover, such a view ought to appraise the impact that remittances have on communities, including socio-cultural aspects and people's sense of well-being. Livelihood strategies involve the continuous management of different social, financial, physical, human, natural and political resources guided by desired outcomes of security and vulnerability reduction, but also by elements such as self-esteem and well-being. For example, Daskon and Binns (2010) point out the importance of 'cultural resilience' in the face of social, economic, political and environmental changes and shocks. Daskon and Binns (2010: 1086) note that Sri Lankan "rural communities consciously choose to act in ways that not only increase their livelihood security but also, more importantly, their cultural identities, traditions and value systems". The authors refer to the concept of 'cultural capital' introduced by Bourdieu (1983), and more generally to the notion of 'social capital'. Allen (2006: 91) defines social capital as a combination of "social networks, reciprocal ties and the rules and behavioural norms that govern them". Maintenance of these cultural norms and practices, while contributing to people's well-being, may also enhance communities coping capacities to face environmental hazards (Bebbington, 1999; Pelling, 2002). For example, when Hurricane Georges hit Dominican Republic, the shared cultural practices and strong social cohesion existing within the population of the marginalised settlement of Los Manguitos facilitated collective actions in time of hardship and ultimately allowed them to better cope with the event (Pelling, 2002). Additionally, social capital is a resource that may provide people with

access to other resources such as remittances, information and knowledge, and potentially empowers them politically and institutionally (Bebbington, 1999; Pelling, 2002). Although less tangible than other resources, social capital contributes to the quality and sustainability of livelihoods (Bebbington, 1999), leading Sen (1997) to argue that assessing livelihood strategies also implies focusing on factors related to the preservation of cultural and social practices.

Concepts of cultural practice and well-being appear as particularly relevant in the context of PICs as the different livelihood mechanisms developed by the Pacific populations, including remittances, are strongly based on these values, thus encompassing cultural belief, kinship, inter-generational reciprocity, as well as other forms of knowledge passed from generation to generation (Barnett and Campbell, 2010; Mercer et al., 2007). These mechanisms are rooted in a day-to-day lifestyle reflected within the cultural, economic and political organisation of most Pacific islands societies. For example, the Samoan way of life (fa'aSamoa), structured on a chiefly (matai) system, is based on a 'gift-giving' kinship commitment implying that material and financial support are exchanged and shared within the extended family (aiga) (Thornton et al., 2010). Furthermore, the chiefly system and the kinship obligation shape the economic and political structure of the country as they are part of the Samoan constitution and consequently, play an important role in the decisions-making at both local and national level (Macpherson, 1999).

Hence, social ties and kinship are some aspects that constitute Pacific islanders' identity and permit remittances practice to be maintained (Marsters et al., 2006). They are the strengths of these populations and are part of their cultural and social capital. Thus, being central to reinforcing people's capacity to be 'their own agent of change' (Sen, 1997), such elements should also be considered when analysing the role of remittances in people's livelihood and response to disasters.

## 2.6 Conclusion

This paper has reviewed the concepts of vulnerability, coping capacities and sustainable livelihood, which are interconnected as they relate to entitlements to access and use of livelihood resources. Moreover, the importance of people's diversification strategies in their struggle to deal with social, political, economic and environmental changes and shocks has been described. In an era when local and often complex dynamics are increasingly linked to global changes, transnational social networks and the related remittances seem to play a growing role in both people's daily livelihood and in time of disaster. While remittances are linked to the recipients' lack of access to livelihood resources, this practice also represents the extension of social and/or cultural capital of the senders and the receivers. Remittances appear therefore as both a weakness that originates within the vulnerability context and as a strength that enables people to respond in the case of a disaster occurrence. Although remittances practice is important in many low-income countries, the dominant approach to the study of remittances, usually short-term and economic, has produced limited knowledge regarding the role of this mechanism in the face of disaster. This paper has argued that filling this gap is essential in order to better inform policies geared toward DRR and disaster response. Because remittances are rooted in people's everyday livelihoods and of the complexity of this practice, adopting a people-centred approach more sensitive to communities' perceptions and values is important. A sustainable livelihood approach tells us about people's vulnerability and if the way they respond and adapt to shocks and stresses is desirable and reversible. Although some evidence seems to indicate that when a disaster strikes remittances are a reactive mechanism, further studies are needed to explore the outcomes and impacts that such strategy has on its users. Remittances may help a disaster-affected population in dealing with immediate livelihood security objectives and even strengthen its livelihoods in the long term, but in some cases this strategy might not be sufficient or sustainable (i.e. it might increase dependence, or have effects on other members of the family). Hence, such information appears as central for both humanitarian assistance and DRR policy, as a critical question for aid and development agencies remains when and how to

support people's current and future livelihoods (Schafer, 2002). Moreover, participation of people concerned in defining priorities for practical intervention and thus, building on their strengths and abilities to face natural hazards, are of paramount conceptual and policy importance (Haque and Etkin, 2007). Such an approach would reinforce the creative and dynamic role that affected people should play within DRR, rather than being the helpless victims that aid agencies generally consider them to be.

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## Chapter 3 Using participatory tools to assess remittances in disaster

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Le Dé L., Gaillard J. C. and Friesen W. (2015). Using participatory tools to assess remittances in disaster. *Humanitarian exchange* (in press).

### Abstract

In many low-income countries, remittances help to sustain people's livelihoods and help them reduce their vulnerability to disasters. However, most of the studies on this topic are short-term and rely on econometric methods and analysis. Research suggests that aid agencies are aware of the importance of remittances in disaster contexts but rarely consider them within their relief actions and recovery programmes since their understanding of such mechanisms is generally very limited. Drawing on fieldwork in Samoa, this article concludes that participatory methods, despite some limitations and challenges, contribute to a better understanding of the complexity of remittances and their importance in people's livelihoods following disaster.

### 3.1 Why participatory methods?

Most studies exploring remittances during disasters use econometric methods based on national financial and migration data, which are often combined with questionnaire-based surveys (Le Dé et al., 2013). These economic methods of assessment give little insight for Disaster Risk Reduction (DRR) and Disaster Risk Management (DRM), such as who has access to remittances and how important this resource is within people's livelihood system; different aspects that prove to be crucial in DRR and DRM. Moreover, such methods may be



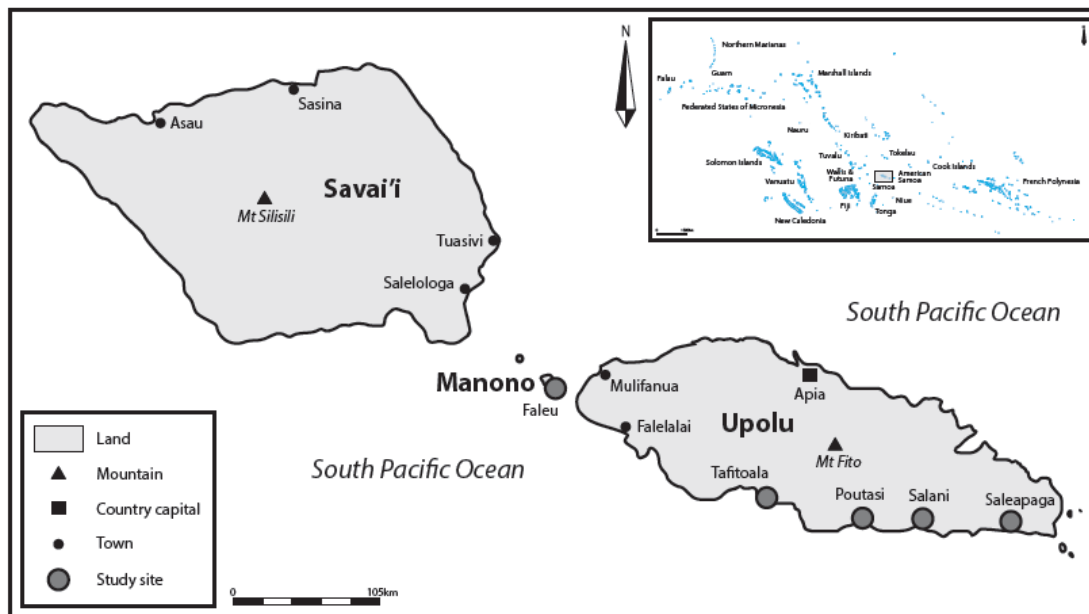
subject to large errors and provide limited information on remittance practices (Hammond, 2011). First, the recorded data on remittance flows is often unreliable, as a large part is sent through unofficial channels (Connell and Brown, 2005). Second, survey-based research often consists of very long questionnaires that use pre-determined categories that do not fit with people's own criteria and perceptions. Third, these methods usually provide information at national level and do not acknowledge smaller scale patterns of remittances systems (Le Dé et al., 2013).

Participatory methods aim to be more cognisant of people's perceptions and priorities. Furthermore, participatory tools enable the collection of both qualitative and quantitative information that more conventional methods (e.g. questionnaire-based surveys, econometric methods) cannot capture. Participation is increasingly used in Community-Based Disaster Risk Reduction (CBDRR), an approach which greatly emphasises the need to build on people's own capacity to cope with natural hazards (Gaillard and Mercer, 2013).

### **3.2 A community-based research project in Samoa**

The research took place in Samoa, in the south Pacific where both remittances and vulnerability to natural hazards are very high. On the 29<sup>th</sup> of September 2009, Samoa was hit by a tsunami that killed 143 people and left 5,000 people homeless (GOS, 2010). In December 2012, some of the same communities were hit by Cyclone Evan (GOS, 2013).

Figure 3.1: Location of the villages in Samoa involved in the participatory process



The overall aim of the research was to appraise the importance of remittances in households' response to hazard-related disasters by investigating (a) who has access to remittances; (b) the importance of remittances relative to other livelihood resources; (c) how long after a disaster do households receive remittances and at what levels; (d) the purposes for which remittances are used; (e) and the extent to which remittances help households to address their perceived priorities following a disaster.<sup>5</sup> Participatory methods were used to address these objectives. The process of selecting and contacting communities for the study was facilitated by the National Disaster Management Office (NDMO), which supported the research project, and the Ministry of Women, Community and Social Development (MWCSD) (see Figure 3.1).

Fieldwork took place between 2012 and 2013. Eighty-two semi-structured interviews were carried out in five coastal villages of Samoa affected by the 2009

<sup>5</sup>Some of the actual outcomes have already been published in Le Dé L., Gaillard, J. C. Friesen W. and Smith F. M. (2015). Remittances in the face of disasters: A case study of rural Samoa. *Environment, Development and Sustainability*, 17(3):653-672.

tsunami and some hit by cyclone Evan in 2012. Participatory activities (see Table 3.1) were later carried out in four of the villages, mainly because of divergent stakeholders' views and interests regarding the research. While less quantitative data on remittances was collected as a result, having fewer study sites meant that more time was spent with the communities selected.

Table 3.1: Participatory tools

Method	Purpose
Semi-structured interviews	To understand the local context and gather different information from this obtained via participatory activities.
Wheel of livelihood resources	To determine what are the different resources that people use to make a living and to face natural hazards and to define how import are remittances within that system.
Proportional piling	To determine for what purpose people use remittances both before and in time of disaster.
Listing via carousel exercise	To define poorness and richness criteria to engender discussions on how the type of incomes, access to resources and level of wealth guide remittance practices.
Timeline with scoring technique	To identify when and in which proportion remittances, government support and NGOs' aid was received the year following the disaster.
Matrix scoring	To compare the different resources used to cope with and recover from the disaster, using community-determined impact indicators.
Group discussions	To gather qualitative information on the different aspects linked to remittances in a disaster context

### 3.3 Participatory tools and process

A wide range of participatory techniques were used including the wheel of livelihood resources, proportional piling, carousel activities, timeline with scoring technique and matrix scoring.

#### 3.3.1 *Wheel of livelihood resources*

Individual interviews revealed disparities among members of the communities about the amount of remittances received and the level of dependence on this

resource. It was therefore essential to develop a tool that could rapidly assess the different resources that constitute people's livelihood, and that could reflect the disparities amongst households regarding the importance of remittances. For this purpose we developed the 'wheel of livelihood resources'. This technique first requires that participants, as a group, list all of the livelihood resources and activities they employ both normally as well as during disasters. In normal times, resources listed included farming, coconut harvesting, paid employment, remittances, handicrafts, mat weaving, raising cattle and fishing. During times of disaster, people listed in addition to these livelihood resources, government support, external aid, and loans/credit. Each resource was written on a card and then stuck on the pillars of the 'fale' (traditional open Samoan house), permitting the participants to visualise the resources identified. When this process was completed, the cards were displayed on each cell of the wheel of livelihood resources, which is comprised of concentric circles and lines radiating from the centre (Figure 3.2). Each participant is allocated a row and each cell corresponds to a resource that the participants had previously identified. Participants were provided with 20 stones (shells or seeds can be used) that represented the household's income, assets and resources. Each head of household then distributed the stones among the livelihood resources, in accordance with how important each resource was to them on a daily basis. The facilitators recorded the data directly on the wheel after double-checking its accuracy with participants. The exercise was repeated but with participants being asked to re-allocate the stones to reflect the relative importance of these resources during disaster. The participants could indicate the trade-offs they made and combinations of resources used, and how these become more or less significant in a crisis. Recording the information pre- and post-disaster on the wheel (using different coding) is important as it facilitates dialogue and helps participants to visualise both their resources and the decision-making process.

Figure 3.2: Wheel of resources in Poutasi village



### *3.3.2 Proportional piling*

Proportional piling activities were carried out with each disaster-affected community. The process started with an interactive discussion with all the participants that listed what they used remittances for both before and after the disaster. The different uses of remittances were written on cards that were positioned on the floor in a circle. In the middle of the circle 40 stones were placed in order for the participants to indicate their use of remittances. At the beginning, the participants estimated their spending of remittances by allocating different piles of stones. After visual observations and discussions (e.g. “do we really spend that much for food?”), the stones were redistributed. The participants then explained their choices to the facilitators, delivering insightful information on the rationale behind their remittances-related livelihood strategies.

### *3.3.3 Carousel activities*

One of the objectives of the project was to determine who has access to, and makes use of, remittances, information which is lacking in most studies. The first step was to understand what comprises wealth in Samoa. Key informants and community leaders consulted during initial fieldwork identified three wealth categories: the poor, those in the middle, and the rich. A carousel activity was conducted, involving three different groups of participants that they formed themselves, and three flipcharts. Each group was allocated one flipchart and participants asked to define from their perspectives the different components shaping wealth. After a few minutes, the flipcharts rotated clockwise (normally the people move but in most villages participants decided to remain seated) and each group had the opportunity to add more characteristics to the definition of wealth. Discussions were very lively, sometimes lasting up to two hours. One participant commented, “we are learning things that we all already know, but never had thought together about”.

### *3.3.4 Timeline and matrix scoring*

Timeline with scoring technique was carried out to define in what proportions remittances increased after the disasters, for how long, and in comparison with the support received by the government and Non Governmental Organisations (NGOs). The matrix scoring comprised the resources that the participants had identified earlier with the wheel of livelihood resources. These resources were listed on the horizontal axis while people’s objectives, classified in seven categories, were written on cards placed along the vertical axis (see Figure 3.3). Each participant was given 30 stones to rank which resources, including remittances, were the most important in achieving particular outcomes.

Figure 3.3: An example of matrix scoring



Source: Photo taken by the author, Salani village July 2013

Although remittances are important for households in facing crisis, people would see remittances as part of their everyday life and as an expression of love and affection from their relatives. It was only after reflection and discussion that the participants started to think about this resource as a coping mechanism and/or strength. They overall never really thought about this resource as a mechanism that could be supported by NGOs or the government during and after disasters.

### 3.3.5 Tools sequencing

The sequencing of these tools proved to be important for enabling active participation, trust building, lively debates and discussions that provided both participants and the researcher with relevant and insightful information on different issues surrounding remittances and their role in time of disaster. The wheel of livelihood resources followed by proportional piling techniques allowed people to move around and actively participate, making the exercises fun and contributing to an atmosphere of trust. The third tool, the carousel exercise,

encouraged participants to reflect on how wealth guides the need for and access to remittances. After trying other sequencing combinations, it was clear that when the carousel activity followed the wheel of livelihood resources, people defined wealth in relation to the availability and scarcity of resources, including access to jobs, credit, land, wage level and savings. If starting with the carousel activity, people would define wealth in relation to criteria that were not relevant for the project. The discussions on these issues would not be very insightful either for the participants or for the researcher and would not necessarily help understanding the importance of remittances in shaping wealth/poorness and their role in people livelihoods before and after disasters. Timeline provided new as well as complementary information to that generated with the previous tools. The matrix-scoring tool was used at the end of the participatory process, as making best use of it required having extensively discussed different aspects of remittances and disasters beforehand.

### **3.4 Methodological strengths of participatory tools**

Bringing together people who are directly concerned with issues of remittances and disasters generated rich qualitative and quantitative information. The main strengths of participatory tools and methods were:

- Participatory tools proved very efficient in measuring some aspects of remittances and households' livelihoods. This included quantifying remittances that are not part of official channels (e.g. hand carried cash, goods, and shipping containers), comparing remittances with external support (e.g. NGOs and government aid), and measuring activities that are part of people's livelihoods but do not necessarily generate income (e.g. subsistence fishing and farming).
- Participatory methods enabled researchers to quantify remittances in relation to households' incomes, how they fluctuated over time, and how they were spent. This would have been impossible through more



conventional methods that use pre-defined categories and are based on Western constructs (e.g. percentage or monetary value).

- The visual and interactive character of participatory techniques enabled a wide range of people to contribute their views and analysis, including those with limited knowledge of economic or scientific concepts and those with low levels of formal education or who were illiterate and/or innumerate. Many of these people would have had difficulty answering a questionnaire that involves numbers and percentages of income.
- Participatory tools potentially increased the accuracy of the quantitative information obtained as they encouraged participants to discuss, cross-verify and refine the data to finally reach consensus.
- Using a range of different participatory activities and debates involving the same participants helped both the participants and the researcher to identify more complex patterns, like who has access to remittances and why.
- Group discussions provided insight on the social and cultural aspects of remittances.
- The participatory process allowed participants to discuss and learn more about their vulnerabilities and capacities and how these are shaped by remittances and disasters.

### **3.5 Methodological challenges and ethical considerations**

Although using participatory tools enabled a deeper understanding of the issues surrounding remittances, participation required building strong relationships with local communities, a very time consuming process. Ethical issues such as who owns the data, whether and how it can be shared, and who is empowered

also had to be carefully considered (Chambers, 2007). For example, some information might be more delicate to share with the other participants, such as the amount of remittances received. In this project, a decision was made to ensure confidentiality by collecting these data using individual semi-structured interviews so that participants would not feel that this was 'purely extractive research'.

Adopting a participatory approach generally implies carrying out a small-scale analysis. While such studies may not produce statistically significant or generalizable results, they can potentially enable better monitoring of ethics, provide more detailed information, empower participants, and be less costly. A larger sample size, that more conventional methods pursue to provide statistically significant results, does not automatically mean better information, and may ultimately mean more bad information (Mayoux and Chambers, 2005).

### **3.6 Conclusion**

Remittances are complex systems that involve socio-economic, political, cultural conditions, motivations, and capacities as well as local and global constraints and opportunities. Thus, conventional methods of assessment prove to be limited in answering some of the central questions surrounding remittances and disasters including who has access to remittances, why, and how this resource helps them to deal with disasters. Working directly with concerned communities and using participatory methods is required if we are to gain a better understanding of remittances and the role they play in people's response to disasters.

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## **Chapter 4 Academics doing participatory disaster research: how participatory is it?**

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Le Dé L., Gaillard J. C. and Friesen W. (2014) Academics doing participatory disaster research: How participatory is it? *Environmental Hazards*, 14(1):1–15.

### **Abstract**

Participatory methods in disaster research and disaster risk reduction are increasingly used by non-governmental organisations (NGOs), government agencies, and academics. The three key principles of participatory research are: (a) empowering the powerless, (b) instigating changes at policy level, and (c) generating sustainable solutions that match with local communities' needs. Yet, academic research is inherently extractive and local people are generally not involved in the research project design and objectives, nor in the assessment of the research outcomes. Reflecting upon fieldwork done with disaster-affected communities, this article analyses the difficulties and limitations faced during the participatory process and challenges the capacity of participatory research, when carried out in an academic context, to generate these three key principles. It is concluded that there is need for more accountability of academics towards local communities, and greater involvement of the participants within the data collection and analysis process.

Keywords: participatory methods - academic research - participation – ethics - empowerment - disasters

## 4.1 Introduction

For the last few decades, government agencies, non-governmental organisations (NGOs) and academics dealing with disaster research and disaster risk reduction (DRR) have increasingly used participatory methodologies. Initially named rapid rural appraisal (RRA) and participatory rural appraisal (PRA), they have been defined as “a family of approaches and methods to enable rural people to share, enhance, and analyse their knowledge of life and conditions, to plan and to act” (Chambers, 1994a: 953). Participatory methodologies emerged as alternatives to the dominant top-down approaches, such as extractive survey-based questionnaires or studies using statistical models (Cornwall, 2011). This contrasts with technocratic approaches where the expert has a central role, whereas participation recognises the validity of local knowledge and the ability and legitimacy of poor people to carry out their own analysis (Freire, 1970). Indeed, participation seeks to do things ‘with’ and ‘by’ people instead of ‘to’ or ‘on’ them (Cornwall, 2000). This approach supports the need for integrating local communities’ views, skills, and priorities within the research process, and asserts that those primarily concerned should be active contributors to addressing issues on disasters (Chambers, 1997; Kelman et al., 2011). In adopting such an approach, participatory research claims to deliver three key principles, which overlap and are inherently connected to the participatory process.

Firstly, participatory disaster research claims that involving the local community in the research process, including in the design of the project, the production of the data and its analysis, leads to empowerment (Chambers, 1998; Gaillard and Maceda, 2009; Mercer et al., 2008). Empowerment is understood in the sense that participating in the production of knowledge equips people with information and tools that allow them to communicate and debate with local experts and decision-makers (Gaillard and Maceda, 2009; Nelson and Wright, 1995; Rambaldi et al., 2007). The second claim of participatory research is to “contribute to changes at levels which are policy-related, institutional and personal” (Chambers, 1998: 105). This aspect of participation is strongly linked

with the concept of empowerment that permits the development of people's awareness on different issues, including on their capacities of analysis and self-initiating DRR projects, and thus enables collective action and change (Chambers, 1994b; Cornwall, 2011; Freire, 1970). Thirdly, participation claims to generate sustainable solutions that fit with local communities' priorities. Participatory research aims at giving a voice to everyone, including the minorities and those marginalised (Chambers, 1997). Such an approach should lead to more equitable distribution of resources and may better address local communities concerns, including those of the powerless (Gaventa and Cornwall, 2008; Holland and Blackburn, 1998; Paul, 1987).

Participatory approaches and techniques have rapidly expanded, but their growing use is not limited to NGOs, donors, and governments. Academics involved in disaster research have also increasingly adopted participatory approaches, allowing them to gather a wide range of rich qualitative and generalizable quantitative data (Chambers, 2003; Mayoux and Chambers, 2005). The capability of participatory methods to collect relevant information is not the topic of this article. Instead, it will question whether participatory disaster research, when used in an academic context, is able to deliver its key principles of empowerment, policy change, and sustainability. Academic research, extractive by nature, is guided by the need for exploitable and/or publishable data that imposes an agenda on the research (Mercer et al., 2008). Local communities are generally chosen as case studies for research. In this approach, the researcher has a pre-determined objective, which often means that the participants are not involved in the definition of the research project, nor in deciding the goals to be achieved or in the evaluation of the research outcomes. This raises a number of questions, such as: can participatory disaster research, in an academic context, address local communities' concerns and generate sustainable solutions to problems that directly affect them? Can it empower participants and create the conditions for policy changes? What are the benefits for the participants? And ultimately, can we talk about participatory research in an academic context? These questions emerged from the application of participatory methods with disaster-affected communities in rural Samoa, for

the purpose of PhD research. The aim of the research project was to investigate the role that remittances play in households' responses to disasters related to natural hazards. Drawing on this practical experience, this paper reflects on the process and outcomes of participation when used in an academic research situation. It critically analyses the difficulties and limitations of specific methodological approaches in the Samoan socio-cultural and disaster context. This article further challenges the capacity of academics in delivering the key principles that participatory research aims to achieve. Before this, a short review of the concept of participation and its three key claims and how they interact conceptually is provided.

#### **4.2 Participatory methods for disaster research and disaster risk reduction: rationale and key principles**

Participatory research started with the recognition of the complexity of poverty, and the need to better address the concerns of those experiencing difficulties (Chambers, 1994a). Participatory research builds on local people's knowledge and experiences to guide them in discovering solutions to problems for themselves (Ivanitz, 1999). The work of Freire (1970) with his book *Pedagogy of the Oppressed* has been very influential for the participatory disaster research approach. In short, Freire (1970) argues that the poor and the marginalised should carry out their own analysis on their own terms. Part of this approach is linked to understanding the multiplicity of realities and the need for recognising that experts' realities are not similarly constructed as are those of the local communities (Chambers, 1998). Moreover, central to participatory research is the concept that power and knowledge are inseparably linked (Gaventa and Cornwall, 2008). Indeed, integrating the views and knowledge of those often excluded from the research process, would give them more voice in decisions and result in more culturally accepted actions (Mercer et al., 2007). Moreover, Collins and Evans (2008) argue that bridging local people's expertise with that of scientific expertise produces a more robust decision-making process, including on problems involving technical decisions. Yet, a major challenge is often to

make local knowledge and skills credible and communicable to the local experts, over an approach where scientific knowledge (e.g. volcanology, geology, hydrology) and top-down expertise generally prevail (Gaillard and Mercer, 2013). Different studies have documented the usefulness of participatory techniques generated with and by local people information and tools that are tangible, and communicable to the relevant stakeholders (Rambaldi et al., 2007; Shah, 2013). For example, Gaillard and Maceda (2009) demonstrate how participatory 3 dimensional mapping (P3DM) has enabled local communities to enter in a collective reflection with local experts and relevant institutions on the ways to reduce their vulnerability to disaster. Indeed, participation claims to be empowering, since it enables the grassroots to dialogue with scientists and political institutions, and ultimately gives them more voice for planning and actions (Chambers, 1998).

Empowerment through participatory research is not only about recognising the expertise of local communities against that of professional experts. Authors such as Bachrach and Baratz (1970) and Freire (1970) claim that the active participation of local communities in the production of knowledge is a means for them to have an influence on the framing of the problems that affect their lives, and on the solutions to be sought. They support the view that local people become “actors [that] can affect the boundaries and indeed the conceptualisation of the possible” (Gaventa and Cornwall, 2008: 72). Thus, participation should increase people’s self-consciousness on different issues that affect them and build their capacity in self-initiating projects (Mansuri and Rao, 2004). Such an approach is part of the discourse on self-help and self-reliance that stresses the proactive perspective of community-driven development and community-based disaster risk reduction (Gaillard and Maceda, 2009). In this view, participation may increase communities’ capacity of negotiation, including with national governments (Estrella and Gaventa, 1997). For example, in a participatory project done in Philippines and El Salvador Tanner et al. (2009) show how children, usually perceived as a vulnerable and passive group, have taken the initiative to develop actions aimed at reducing disaster risks. Some of the research outcomes included building natural barriers to protect from hazards,



improving waste disposal containers, and further developing guidance for DRR training events from the Plan office. Moreover, children's active commitment and self-initiatives have influenced the broader community and local institutions on both the perception of risk and need for further DRR actions (Tanner et al., 2009). In Rwanda, participatory research with local communities has contributed to produce a national census (Shah, 2013). The researcher argues that involving people in the data generation process led to a shift from "obedience culture" to "citizenry culture". This approach contributed in shaping policy and programmes at the national level, permitting the identification of poor and marginalised households that could benefit from livestock restocking programmes as well as free health insurance schemes (Shah, 2013). In both examples, the authors point out that participation may provide local communities with more control over the public agenda, and ultimately allows for collective action and changes at policy level. Furthermore, in its 2000/2001 report, the World Bank argues that self initiative and empowerment through generation of information may strengthen people's capacity for shaping and controlling public sector performance, which at the same time might increase the accountability of institutions and policy makers towards local communities (World Bank, 2000).

Participation places local communities at the centre of the disaster research, in order for them to self-assess their vulnerabilities and capacities, and identify the sustainable goals to attain in relation to their priorities (Mercer et al., 2010). Hence, participation is about people, who should be the beneficiaries of the research outcomes. Therefore, participatory disaster research aims at giving a voice to everyone, including minorities and the marginalised (Desai and Potter, 2006). This approach claims to produce a more democratic policy negotiation (Gaventa and Cornwall, 2008). The expected results for the potential beneficiaries might include the maintenance of community assets, improved allocation of funding that better addresses people's needs, more accountability from the government and other stakeholders external to the community and a better repartition of public services and goods (Mansuri and Rao, 2004). Such outcomes are likely to be delivered if local communities develop a sense of

ownership towards the research (Estrella and Gaventa, 1997; Mercer et al., 2008). Sense of ownership might occur when people are involved at different phases of the project, have themselves defined the objectives to achieve and perceive that the outcomes will benefit them (Cornwall, 2000). Narayanasamy (2009: XVI) maintains that “Participation at different stages of the development process makes the participants realise that they are part and parcel of the development, which ultimately makes them ‘own’ the output and outcome of the development intervention”. Indeed, participatory research should provide sustainable solutions that are likely to be supported in the long-term, since those directly concerned (including the poorest and the marginalised) have been involved in all stages of the research process (Holland and Blackburn, 1998). On the other hand, sustainability generally requires “an enabling institutional environment” with government being responsive to local communities needs, and “committed to the idea of transparent, accountable, and democratic governance” (Mansuri and Rao, 2004: 43).

Although many development agencies and academics have supported participatory perspectives as a way to increase communities’ capacities to face disasters and foster development, such a view is not universally shared, and the use of participatory research has been the subject of critiques and debates. By the 1990s, the terms ‘participation’ and ‘empowerment’ had become buzzwords fully integrated in the semantics of mainstream development (Cornwall, 2000; Pain and Francis, 2003). A first set of critiques emphasises that participation and empowerment have only been used in name and under an illusion of consultation, leading Oakley to declare: “Many development projects talk of ‘empowering’ in the sense of specifically enabling people to cope more effectively with and play a part in the every-day administrative and bureaucratic demands of a development project’s life” (1995: 6). Indeed, there is often a gap between theory and practice. For example, following the 1993 Maharashtra earthquake in India, a majority of agencies involved in the post-disaster phase asserted active participation of local people in the reconstruction process, but some of the staff being on-site were challenging this claim ‘off the record’ (Twigg, 1999). Secondly, participatory methods have been criticised for being

“just fancy” (in Scoones’ words), with no theoretical basis and only fitting the perspectives of a particular discipline (Scoones, 2011: 122). Thirdly, some critiques point out that these methods are now part of “the participatory development orthodoxy” (Cooke and Kothari, 2001). In their book *Participation: the new tyranny?*, Cooke and Kothari (2001: 15) argue that even with the best intentions, “participatory development may inevitably be tyrannical”. Participatory techniques have been influenced and nourished by different sources and movements, practical field experience and theoretical reflection and learning (Cornwall, 2011; Holland and Blackburn, 1998; Mayoux and Chambers, 2005). Thus, the capacity of participatory approaches in generating robust and generalizable data is not questioned here. But while there are many reasons given for the benefits of participatory disaster research (e.g. empowerment, policy change, sustainable solutions), very few academics using participatory approaches document the process by which they generate these outcomes, and whether, if at all, they deliver the key principles of participation. The next section will describe the participatory process with disaster-affected communities in Samoa, emphasising the difficulties and outcomes of such an approach.

### **4.3 Participatory disaster research process: difficulties, opportunities and ethical issues**

#### *4.3.1 Research context and methodological approach*

In Samoa, remittances levels are quite elevated. This situation is fairly representative of most small island developing states (SIDS) where remittances often represent a significant resource for households both to make a living and to overcome disasters (Le Dé et al., 2013). The study aimed at assessing the importance and role of remittances in households’ response to disasters. This was an academic research project and it was not attached to any particular governmental or non-governmental project, nor did it receive any external funding. Contrasting with most existing studies on remittances that are based on statistical models and/or questionnaire-based surveys, this research utilised

participatory tools in order to identify who has access to and utilises remittances; how remittances are used; and to what extent they help households in achieving specific goals of coping and recovering. The rationale for using such a methodological approach lies in the fact that remittances are not only money and goods that migrants send to their family left back home, but also involve people's social networks and notions of reciprocity, traditional practices, beliefs and values (Marsters et al., 2006). Indeed, remittances have emotional, cultural, and identity implications, which requires integrating the perceptions of those directly concerned (Le Dé et al., 2013). Furthermore, participatory techniques allow gathering quantitative information (e.g. remittances as percentage of income, spending of remittances, efficiency in attaining particular objectives) that more conventional methods cannot (or limitedly) obtain.

The methodological approach involved three fieldwork periods comprising a total of approximately 4.5 months. It involved living with people by staying in their homes and taking part in some of the daily tasks and activities. Such an approach appeared essential to build durable relationships with local communities and to better understand the social, cultural, and economic components that shape people's livelihood and influence remittance practices. Eighty-two semi-structured interviews were done in five Samoan villages impacted by the tsunami of 2009, some of them being also hit by cyclone Evan in December 2012. These included Saleapaga, Salani, Poutasi, Tafitoala on Upolu Island, and Faleu on Manono Island. Participatory techniques were then carried out with four communities and included the wheel of livelihood resources, proportional piling, listing via carousel exercise, timeline, and matrix scoring.

#### *4.3.2 Involving local communities: outsider-initiated research*

Undertaking research with Samoan communities required receiving approval from the Ministry of Women, Community and Social Development (MWCSO) that would inform local communities of their warrant for the research to occur. Moreover, the National Disaster Management Office (NDMO) supported the research and thus, enabled such a process. While Samoa has a Western-style

parliamentary system, the country has preserved its traditional chiefly (matai) organisation at national and local levels. Hence, approaching communities' leaders and soliciting their collaboration within the research was a precondition to any consultation with villagers. The support from the MWCS and NDMO encouraged village chiefs (pulenuu) to accept that the research would take place in their community. But despite village chiefs' acceptance, having their entire support for a research project that they had not requested nor defined was quite challenging. Although remittances are a central mechanism in helping people to face natural hazards, local communities did not perceive this as a priority in comparison to other aspects of their daily life struggles. Fieldwork took place only a few weeks after cyclone Evan, and it appeared quite clear that in some seriously impacted villages, people were mainly concerned with issues related to housing reconstruction, restoration of water systems, and loss of agriculture production. Although these problems were the priorities for communities' members, there were issues that this research, with a topic that had already been defined, could not address. Indeed, at the start of the participatory process it was quite challenging to present the tangible benefits that the research would provide for both community leaders and the participants, as they did not directly match their main preoccupations.

Even though the researcher was familiar with the context, he was not fluent in the Samoan language and remained a Westerner external to local communities. The researcher sometimes had the feeling of 'selling' the project, which at the same time presented the risk of being 'overpromising' about the benefits of the research. As the researcher was living in the village, people were regularly questioning him about the research. Some of them perceived him as a resource person able to provide all the answers to the community problems. He had the uncomfortable task of convincing them of the contrary. On the other hand, in one village he was told: "this is for your studies, but what do we gain from this?" This villager reported that in the aftermath of the 2009 tsunami some researchers came to the community to collect information, but did not help them nor come back. Thus, finding a balance between not raising too many expectations that could later be disillusioned, but at the same time having the support of village

chiefs and community members, was sometimes difficult.

Although participation was voluntary, people certainly came to the participatory activities motivated by a mix of curiosity, social pressure, courtesy and expectation of benefits (Mayoux and Chambers, 2005). It was very important to be honest and transparent about the objectives of the project. Hence, at the beginning of each participatory meeting the purpose and goals of the research were clearly explained, and a question-response activity allowed the participants to express their concerns and expectations regarding the aim of the research and their participation in it. While living in the village and getting to know most of the people contributed to acceptance by the communities, the researcher sometimes had a sensation of 'imposing' the research on the participants, especially since the nature of the research had already been decided without their consultation. Community members are often busy with daily tasks and it proved difficult to justify taking their precious time for a research project for which the direct outcomes for the participants were hardly perceptible. This meant that participatory exercises had to be short and 'fun' rather than long and tedious. It also meant adapting participatory activities to the rhythm of people's daily life, such as holding them after Sunday church services or following bingo games.

#### *4.3.3 Developing a sense of ownership over the research*

Participatory activities were done in the Samoan language with a Samoan researcher assisting with translation and facilitation. Moreover, developing a sense of ownership over the research was indispensable to reduce the extractive aspect of the research and increase participants' involvement in the participatory process. A choice was made to include as facilitator(s), at least one member of each village. Facilitation requires communication and facilitators primarily need to be knowledgeable of the local culture and context (Jayakaran, 2002). Selecting and 'training' one to a few local person(s) suitable to assist in the participatory process is time-consuming and requires an awareness of the local power relations. Nonetheless, this approach proved to be efficient at

different points. Training local facilitators involved explaining to them the purpose of the tools and how they would be used, working out the activities' timing, note taking and collection of the data that would then be reported to the researcher, and emphasising the importance of equal participation among participants and restraining potential dominating behaviours. These 'training sessions' provided important feedback on how the tools would 'work' with the community and allowed the anticipation of potential ethical and cultural problems. In addition, it certainly limited issues related to power relationships between the researcher and the participants, and what Cooke and Kothari (2001) refer as the 'tyranny of participation'. Local facilitators enabled the creation of an atmosphere of trust, which increased people's confidence in voicing their opinions and helped generate discussions. As a result, the participatory process did not feel forced or unnatural. Instead, such an approach contributed to reinforcing community involvement with, and ownership of, the research.

#### *4.3.4 Giving a voice to everyone*

Participatory approaches often challenge the myth of homogenous 'community' and sometimes lead to conflicts or competing interests (Holland and Blackburn, 1998). Policy documents often refer to the community as uniform, sharing the same values, culture, experience and social interests (Heijmans, 2009). Yet, community members differ in terms of socio-economic level, political power, perceptions and historical background, and these elements regulate their access to resources and influence their livelihood strategies (Guijt and Shah, 1998). Thus, a central element of participation entails that not only the powerful, the rich or the men are involved, but that 'everyone' participate, including minorities and those marginalised (Cornwall, 2000). Although Samoa is a relatively equitable society in terms of wealth sharing, the matai system that rules political organisation is an important element to be considered for ethical participation. Matais are elected by families to ensure their welfare and well-being, and 90% of the titles are held by men (SBS, 2012). At the start of the research, participatory activities took place in the meeting fale (traditional Samoan building) of the

village, where family chiefs and village chiefs assemble monthly and take political decisions (fono). Hence, three separate groups naturally formed within this political configuration, namely women, chiefs, and untitled men (taule'ale'a). Moreover, untitled men do not sit in the fale until being invited by chiefs. As a consequence, generating interaction and discussions between these three groups was one of the difficulties of the research. Some of the chiefs would generally speak for all the participants. Even though women and untitled men were willing to share their views on a particular topic, they were usually self-restraining, or even self-excluding from the process, avoiding contradicting the chiefs' opinions.

While the matai system is at the core of Samoan culture, it was an evident limitation to ethical participatory practices, representativeness of opinion expressed and goals of empowerment pursued by the research. Indeed, it implied adjusting the research method to such specificities. In the village where this experience occurred, it meant conducting parallel activities with targeted groups. With the other communities, it required a careful explanation to village chiefs that if the participatory exercises were to be held in the village meeting fale, participants did not have to be limited to male matais and that the other participants should also have a say in the discussions. In Poutasi, the village chief agreed to these conditions, while in Saleapaga it was decided together with the pastor to carry out activities in the church in order to ensure diversity of participants and liberty of speech. In Salani, the village chief wanted the participatory activities to be formal and done in a traditional way with only matais. After diverse discussions with local facilitators and some village members, they offered to hold the activities in one of the villager-owned fale. This option appeared as the most appropriate and certainly reinforced the feeling of local people that it was their research. Moreover, this approach of using alternative venues turned out to be efficient in counter-balancing intra-community power relationships and giving the possibility to everyone, including women and untitled men, to voice their viewpoints. Nonetheless, it is inevitable that some voices are left out. For example, some people naturally excluded themselves from the process. Thus, while participation aims at giving a voice to everyone, it is in practice a goal impossible to achieve, and it seems more



appropriate to think in terms of 'optimum participation' rather than 'full participation' (Cornwall, 2000).

#### *4.3.5 Participatory ethics*

Involving 'everyone' and ensuring that all the members of a community can equally voice their opinion is at the core of good ethical practices. Ethics in participatory research implies questioning power within the research process as well as in terms of its intended impacts (Cahill et al., 2007). In its simplest meaning, ethics is about the 'the right behaviour' (Singleton and Straits, 1999) and what Lawson calls 'care ethics' (2007). To undertake the study in Samoa, the researcher (like any academic) had to go through an ethical process and adhere to ethical protocols and standards defined by university boards and an ethics committee. These 'gatekeepers' aim to protect participants' privacy, health, and their physical and emotional well-being. While such ethical commitment in research is very important and must be carefully considered, it appeared that there was a gap between this institutionalised ethics and what the researcher faced in the field. A first issue is that the ethical codes and rules that ethics committees have defined should universally apply (Cahill et al., 2007). They assume that ethical issues can be identified before the research starts, which dissociates ethical problems from the specific research context (Elwood, 2007). Second, ethics committees generally refer to those participating in research as 'subjects', who are potentially exposed to psychological or emotional harm and at risk of exploitation by the researcher. This approach treats the participants as intrinsically vulnerable and passive in recognising and dealing with ethical issues occurring within the research process (Elwood, 2007). Therefore, in the name of the 'protection of subjects' such an approach tends to give control over the ethical process to the researcher (Cahill et al., 2007).

In practice, this rigid, bureaucratic and overall top-down perception of what ethics should be often proved to be inadequate and restricted. For example, it was through a collective reflection and initiative with local villagers, pastors, and local facilitators that alternatives such as carrying out participatory activities in a

church or people-owned fale were found and made possible, even if this was not what was specifically proposed before the research. Ethics is best understood on site and requires comprehending local power relationships and being knowledgeable about specific socio-cultural contexts. Moreover, from the research process, new research questions, findings, and problems may emerge. Thus, in contrast with a one-size-fits-all ethical practice, adapting to ethical problems that are context-specific and mutable should rather involve a reflective dialogue and open negotiation with the participants (Askins, 2008; Cahill et al., 2007). Indeed, the researcher-subject model needs to be redefined, which implies “conceptualising research as a collaborative, negotiated process in which the direction and benefits of the research are as much a product of the participants’ involvement as the researcher’s” (Martin, 2007: 322).

#### *4.3.6 Community-driven or outsider-driven research process?*

“The style and mode of facilitation influence who takes part, the nature of outcomes and power relationships” (Chambers, 2006: 1). Good participation and empowerment objectives implied that the participants interpreted and reflected upon the data that they generated via the participatory techniques. Analysis of the data by an outsider would somehow reproduce a top down approach, thus leading to misinterpretation of the problems raised and biased results (Mercer et al., 2008). Using tools that involved visual analysis such as allocation of stones that for example represent the use of remittances, allowed the participants to discuss the result provided, sometimes repositioning stones until consensus was reached. Throughout self-analysis, people seek to make sense of experiences, identify linkages between events, feelings and actions (Van Niekerk and Van Niekerk, 2012). For example, participants had debates around the amount of remittances spent on food, clothes or cultural events. They could discuss the reasons for their choices and analyse their different remittances-related livelihood strategies. The facilitators generally asked the participants to explain the reasons for the information provided, which led to more precision, sometimes modifications and engendered further debates on related topics.

An attempt was made to keep the participatory process open, rather than a standardised facilitation approach. For example, when carrying out the carousel activity, which normally involves groups of participants moving around flipcharts displayed in different locations, most communities chose to rather be seated and pass the flipcharts to the next group. This choice was motivated by a more culturally appropriate practice and made the participants feel more comfortable. However, the influence of the participants in both choosing the participatory tools and influencing the research process was quite limited. The researcher's need for exploitable data implied gathering consistent and comparable information among all case studies, which, for example, necessitated using indicators that had been pre-defined by the researcher and utilised in each community. Moreover, as an academic, the researcher had to address specific objectives and thus, inevitably kept a certain degree of control over the participatory process.

Using participatory methods to assess remittances in the context of disaster provided rich and insightful information. This mixed bottom-up and top-down approach generated data that other more conventional techniques could not produce. However, this experience revealed that a gap exists between theoretical key principles of participation and what academic research can really achieve, which will be discussed in the following section.

#### **4.4 Can academic disaster research deliver the key principles of participation?**

##### *4.4.1 Addressing people's priorities and providing sustainable solutions*

In the context of disasters, the rationale for using participatory approaches seems evident; impacted communities are both those who are affected and those who immediately respond to an emergency situation when disasters happen. Consequently, they are the most interested in reducing the risks of disasters, conditional to their survival and well-being (Gaillard and Maceda, 2009).

However, in practice people may have other priorities linked to their everyday difficulties, which are considered as more pressing threats to their livelihoods and which may render it very challenging to generate their interest for and involvement in research that they have not requested nor perceive as important. In Samoa, while remittances are important for most households in coping with and recovering from disasters, people usually see them as commonplace and 'rooted in their everyday life' practice, rather than an efficient coping strategy such as one that substitutes for insurance systems. Thus, what has been identified by an external researcher as a gap in the literature, which needs to be addressed, may not be similarly perceived by local communities. Warrick (2009) reports a similar experience when undertaking her PhD research on climate change in Vanuatu using participatory methods. She explains that despite important climate change issues in the region of study, participants did not identify these problems as a priority compared to other daily struggles. This issue is strongly linked to the externally initiated approach of the research, which should be clearly differentiated from research requested by local communities for their own interest. Certainly, when participants are integrated into the stage of problem identification, the benefits for the community are more perceptible as they fit with their main concerns and the outcomes of the research are more likely to be sustainable (Pain and Francis, 2003).

Even though local communities may not have been involved in the definition and design of the research, during the participatory process they may express their willingness to address some of the problems that affect them (Estrella and Gaventa, 1997). For Holland and Blackburn, the participatory approach requires some level of flexibility with the research agenda in order to respond to "the priority issues emerging through analysis by local participants" (Holland and Blackburn, 1998: 194 - 195). This configuration of circumstances occurred in one of the Samoan villages particularly affected by cyclone Evan, where water issues, food security and housing reconstruction were people's immediate preoccupations. However, from an academic research perspective such flexibility is quite limited, as the researcher must follow an agenda that has already been determined and requires addressing particular research objectives. The agenda

generally implies that the design of the research and/or the goals to attain have been defined before contact has been made with local communities. Although this does not mean that only the researcher benefits from the participatory process (which aspect is further discussed in the next section), the potential of academic research to address participants' priorities and thus generate sustainable solutions is quite reduced.

Furthermore, the notion of accountability is central here. The agenda may be part of a PhD research proposal which has been approved by a university or a project that has been granted funding by an organisation. However the agenda imposed on the researcher to be accountable to the university or the organisation supporting the research, but this may not ensure full accountability of academics towards local communities. This is a fundamental question that in participatory disaster research has often been overlooked (Twigg, 1999). After the 1993 floods in Dhandhuka, India, one of the NGOs initiated with the local communities a participatory process for more efficient DRR. The community-based process involved a series of debates between community members, local and national officials, and this led to more commitment from the government in improving future recovery actions and more effective DRR measures (Bhatt, 1998). Patel (1997) documents how disaster-affected people have evaluated the performance of agencies that provided them with relief actions. Moreover, in projects involving NGOs and governmental bodies, Marsden and Oakley (1998) suggest that there should be reciprocal evaluation between donor agencies and beneficiaries. Indeed, such an approach could be applied to the academic research context, with for example participants contributing to the definition of the research objectives or delineating indicators to assess the course of the research. In this view, participants should be involved in the monitoring and evaluation of the research process, in both quantitative and qualitative dimensions (Oakley, 1995). For Gaventa and Cornwall (2008) accountability "represents one of the most important challenges facing participatory research". It raises questions such as "who participates in and benefits from the research processes, how is information used and by whom, and does the process transform or support power relations?" (Gaventa and Cornwall, 2008: 78).

#### *4.4.2 Empowering the powerless*

Participation should be beneficial to participants and contribute to the empowerment of socially excluded groups (Chambers, 1994a). In Samoa, an attempt was made to give a voice to everyone, which required doing participatory exercises in locations adapted to the local culture and carrying out parallel activities with targeted groups. Thus, participants such as women and untitled men, as well as matais, could express their views and debate issues that directly affect their livelihood. This process enabled them to reflect upon their vulnerabilities and capacities, and to improve their understanding of how remittances and disasters interact with these elements. In addition, the participatory process engendered 'less expected' outcomes, including ones which were not directly linked to remittances. For example, one of the communities where 31 people died during the 2009 tsunami explained that the research was "the opportunity to, years after the tsunami, talk about something that deeply affected all the families in the village". Although outcomes may be generated at the community level, different groups and people within the community may gain from the participatory process (Holland and Blackburn, 1998). Involving locals who were fishermen, teachers, or students as facilitators was undeniably a positive experience for them. Other researchers have documented the benefits of such an approach. For example, in Bangladesh, Kar (2003) explains how trained local people facilitated a community-led comprehensive sanitation programme. The author stresses that this approach helped the participants in "building a sense of confidence amongst the community in their ability to do things on their own" (Kar, 2003: 17).

Incontestably, assessing the outcomes of participation such as empowerment of the participants is very difficult: participation is a process and it is therefore extremely hard to assess its success on an outcome-based basis. Yet, the capacity of an academic research project in empowering local communities, in the sense of social change, self-reliance, or capacity of negotiation with power structures, is questionable. The extractive nature of academic research reduces the space for creativity and initiatives of participants in both the design of the participatory

tools and the format of the participatory process. During fieldwork, even though local communities were self-analysing the information being generated via timelines, proportional piling, and matrix scoring exercises, these constituted a framework for analysis that was decided by the external researcher and was 'imposed' on local communities. In addition, guided by the need for exploitable data, academics often have to prioritise a standardised participatory process versus a more open one. While the former option induces more extractive and less empowering processes, the latter means that the information produced is harder to analyse (Chambers, 2007). Thus, this approach contrasts with notions of empowerment and self-development that are strongly determined in relation to "the degree to which 'full participative' involvement in every aspect of design, implementation, interpretation and resulting action is achieved" (Estrella and Gaventa, 1997: 25).

Empowerment may occur if the participatory process provides communities with tangible information and tools that allow them to dialogue and negotiate with policy makers and other outside actors (Gaillard and Mercer, 2013). However, in an academic research context, both the data analysis process and the nature of the information generated may do little to empower local communities. In Samoa, one of the aims of the research was to gather quantitative data on remittances, since this information is relevant for academic purposes and needed to inform DRR policy (Le Dé et al., 2013). Yet, the gain for local communities was less evident as they could hardly use this information. The data generated by the participants is likely to be more robust and 'usable' after being analysed by the researcher. However, this is generally done in a distant university without the contribution of local communities in the final interpretation of the results or in the writing of the research. Therefore, the capacity of local communities in negotiating with policy makers is much reduced and thus empowerment is quite unlikely to occur. Such aspects raise different methodological and ethical issues at the core of participation, including; who gives sense to the data collected? Who owns the information and for what purpose? And ultimately, who is empowered? Abbot and Guijt (1998) point out the trade-offs that researchers often have to make between scientific rigor and

more participatory practices which are closer to goals that participation aims at delivering. Of course such trade-offs depend on the research objectives. On one hand, scientific rigor ensures a certain level of objectivity and replicability of the data obtained that can then be scaled-up. On the other hand, a more participatory process is likely to be context-specific and locally relevant, thus with a greater emphasis on participants' learning (Abbot and Guijt, 1998). In practice, research guided by 'scientific rigor' presents the risk that participation is converted into a series of tools that incite participants to express their opinion, but which hardly empower them, and may even become a form of tyranny (Beazley and Ennew, 2006).

#### *4.4.3 Initiating policy change on disaster risk reduction*

Although participatory research provides a framework for action, initiating policy change requires a combination of both engagement and self-determination from local people and the support from the local, regional, and national institutions (Gaillard and Mercer, 2013; Jackson, 1997). As demonstrated in the previous sections, self-determination is unlikely to occur if local communities have not demanded the participatory research and thus do not perceive any tangible benefit or potential responses to the problems that affect them directly. Moreover, creating a space for policy change implies the willingness of policy-makers to make serious changes and their early involvement in the research process is often essential (Holland and Blackburn, 1998). It often necessitates long-term collaboration and connections (Cornwall, 2000).

In Samoa, the research received initial support from the relevant ministries, such as the NDMO and the MWCSD, but further attempts to involve them (as well as NGOs) 'more deeply' within the participatory process were unsuccessful. Government agencies and NGOs were generally busy with other operational tasks and community projects in other villages. Besides, many of them had limited resources and faced understaffing issues, while for others DRR was not a main priority. Interviews and more informal discussions with officials from the



national government and aid agencies confirmed their awareness of the significance of remittances as a resource both in people's day-to-day livelihood and in times of disaster. Nonetheless, their understanding of this practice seemed quite limited, and little effort was made to consider this mechanism within their aid programmes and DRR policy guidelines. Of course, difficulties in mobilising policy-makers around a participatory research project are not confined to academic projects. For example, Shah (1998) explains the different challenges of NGOs in influencing public policy. On the other hand, including government bodies or aid agencies within the research may affect the participatory process itself, such as raising expectations of the participants that the research cannot achieve (Mercer et al., 2008) or having an influence on the research objectives that must fit with governments or NGOs agendas (Ali and Cotton, 2006).

#### **4.5 Conclusions**

Participation is about local people, who should be the beneficiaries of participatory disaster research and dynamic actors for their future (Freire, 1970). In an ideal situation it would be the participants who request external facilitation, design the research and, according to their own criteria, delineate indicators of success and evaluate the research outcomes (Chambers, 1994a). Nonetheless, in an academic disaster research it is generally the researcher who approaches communities, most of the time with a defined research topic and pre-decided methodological tools that fit with its research objectives. Moreover, the research agenda and 'scientific rigor' often implies a standardised participatory process, which considerably reduces the space for initiative and voice of participants in both the framework of analysis and final interpretation of the results. These elements largely challenge the capacity of participatory disaster research, when carried out in an academic context, to generate its key principles of sustainability, empowerment, and policy change. Hence, it is questionable whether the term 'participatory research' is appropriate to the academic research context. For Beazley and Ennew (2006) "Participatory methods' are

not participatory if a researcher chooses both research questions and research techniques (e.g. a visual method), takes the data collected away to a distant university and analyses them with no further discussion with the research subjects". Thus, a clear distinction should be made between two different approaches: participatory research demanded by local communities for their own interest, and academic research utilising participatory techniques with local communities. The former entails empowerment of local people through the definition of the project and its objectives, which may better address their priorities and increase the possibility for sustainable solutions. The latter, is less likely to deliver answers to local communities' problems or empower them, and might rather serve the research (or the researcher) interests.

Such matters largely come from the extractive nature of academic disaster research (Mercer et al., 2008). Furthermore, this situation points out different methodological and ethical issues such as accountability of academic researchers towards local communities, ownership and utilisation of knowledge as well as influence and control over the process (Crow, 2013; Estrella and Gaventa, 1997). Rubin (1995: 23) states that there is "a need for greater clarity between all parties involved regarding how, by whom, and against what criteria, [development] work is going to be measured". Moreover, reflecting on his research with Filipino communities, Otto van den Muijzenberg (1996: 344) recommended a "high degree of involvement of those studied in the formulation of goals of research and a stronger representation of their, as opposed to the researcher's interpretation". Some existing studies go in that direction. For example, Jupp and Ali (2013) describe participatory self-assessment with quantitative measures of empowerment within a social movement in Bangladesh. In Mexico, Blauert and Quintanar (1997) developed indicators based on different stakeholders' views to evaluate the participatory process and its impacts. Nonetheless, these experiences remain in projects that involve governments and NGOs, and academic studies documenting the process and outcomes of the participatory disaster research are still rare. Based on fieldwork experience in Samoa, this article suggests that involving community members as facilitators tends to be one step in the right direction towards more participatory

involvement of the local community. Moreover, this approach generates other benefits such as increasing community feeling of ownership over and involvement within the research, providing feedback on the outcomes and impacts of the participatory process, and being more compatible with local cultural practices. Nonetheless, these matters cannot be addressed easily and require deeper reflection and field efforts in order to improve our practice with local communities.

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## Chapter 5 Remittances in the face of disasters: A case study of rural Samoa

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Le Dé L., Gaillard, J. C. Friesen W. and Smith F. M. (2015). Remittances in the face of disasters: A case study of rural Samoa. *Environment, Development and Sustainability*, 17(3):653-672.

### Abstract

In Samoa, like in most Small Island Developing States, remittances are important to sustain people's daily livelihoods and become even more significant in the face of disasters. This study investigates the role of remittances in households' responses to disasters. The focus is on Samoa, where participatory activities and interviews were carried out in coastal communities affected by the tsunami of 2009, and some of which were further hit by cyclone Evan in 2012. It is found that remittances are very fast in reaching those affected and remain high in the long term in order to cope with and recover from disaster. Moreover, remittances interact with external aid since remittances increase when external aid is low and decrease when external aid is higher. Households receiving remittances were able to deal more easily with immediate security needs and recovered more quickly than those with no or limited access to this resource. However, remittances also benefit the wider community, economically, socially, and culturally, for example in perpetuating local tradition. We conclude that governments and aid agencies should take into account remittances in their relief actions and recovery programmes.

Keywords: disaster - remittances - livelihood strategy - coping mechanism - participatory methods

## 5.1 Introduction

In recent years, remittances inflows to low-income countries have increased considerably, reaching over US \$404 billion in 2013 (World Bank, 2014). For many households in the least wealthy countries, transnational remittances constitute an important source of income contributing to the fulfilment of their daily needs. Remittances are a livelihood diversification strategy that households use to balance their limited access to resources, such as job opportunities and/or reasonable wages, insurance, and institutional social security (Calero et al., 2009; Devereux, 2001). Unlike foreign investment, remittances are usually countercyclical as they tend to increase during crises (Ratha and Sirkeci, 2010). In time of disaster, remittances may play a meaningful function in people's survival and recovery (Halliday, 2006; Horst, 2008; Savage and Harvey, 2007). Moreover, they can be fast in reaching those affected, sometimes even before the arrival of international aid or government support (Wu, 2006).

Remittances have been compared to a kind of self-insurance (Yang and Choi, 2007). However, aid actors generally fail to include them in their post-disaster assessments and response interventions (Horst, 2008; Savage and Harvey, 2007). This, on one hand, comes from their limited understanding of such practice, as most studies adopt economic and short-term methods of assessment. Thus, little is known on the importance and role of remittances in the livelihoods of those affected by disasters (Suleri and Savage, 2006). On the other hand, this reflects a broader tendency of aid agencies to underestimate people's capacities to face disasters. Affected populations are generally portrayed as helpless 'victims' and treated as 'recipients' of aid programmes, rather than being involved as creative actors of their future (Heijmans, 2004). For Connell and Brown (2005: 1), "Information is therefore somewhat limited on the current use of remittances [...] on their social influence, and on how they function as a safety net against hardship and poverty".

This article investigates the significance and role of remittances in households' responses to disaster and in reducing their vulnerability to natural hazards. In

particular, it seeks to address the following set of questions: (a) how fast are remittances in reaching those affected? (b) For how long and in what proportion do remittances support disaster-affected households? (c) Are remittances linked to external aid? (d) What are remittances used for? (e) To what extent do remittances help households in achieving coping and recovery objectives? In this study, remittances are understood as the money and goods sent by migrants to their relatives in the country of origin. A sustainable livelihood approach is adopted, which involves the use of qualitative and quantitative participatory methods with disaster-affected communities. The focus of this study is Samoa, a Small Island Developing State (SIDS) located in the South Pacific region. In Samoa, like in most SIDS, remittances are often a prominent source of income for locals (Brown and Ahlburg, 1999; Connell and Brown, 2005). They are mainly sent from New Zealand, Australia, and the United States (US), where more than half of Samoan-born Samoans reside (Stahl and Appleyard 2007). Samoa is also highly vulnerable to natural hazards. On September 29, 2009, a tsunami hit the South coast of Upolu (the most populated of the two main islands constituting this country). The tsunami impacted more than 5,000 people, and is used as a case study in this research. In 2012, cyclone Evan hit Samoa and affected some of the villages involved in this research. Information was collected on this event and provides some input to the study. The next section will provide a short conceptual background on disasters and livelihood strategies. Section three will describe the methodology used in this research. Section four will present the results and section five will discuss these in the broader context of disaster risk reduction.

## **5.2 Disasters and livelihood strategies: conceptual background**

Traditionally, disaster research has mostly focused on the intensity, frequency, and magnitude of natural hazards as the causes of damage and loss (Heijmans, 2009). Qualified by Hewitt (1983) as the dominant *hazard-focused viewpoint*, it has seen disasters as natural, treating them as extreme and unexpected events separated from the broader political, historical, cultural, and socioeconomic

conditions. Such an approach portrays local communities as helpless 'victims' impacted by events that go beyond their control (Bankoff, 2001). Yet, in the face of disasters, people are not passive victims and have always developed some form of aptitude to cope with and recover from shocks and crisis (Wenger and Weller, 1973). Disasters are amplifiers of people's everyday difficulties and rather than extraordinary measures taken in the case of rare events, the mechanisms used by individuals and communities to face natural hazards are generally rooted in their existing structures (Maskrey, 1989). Indeed, understanding how people respond to disasters requires comprehending the complex ways in which they make a living. From this perspective, the concept of livelihood seeks to depict the varied tangible and intangible resources used by people, both on a daily basis and in time of crisis, and tries to appraise the reasons and outcomes for adopting a particular livelihood strategy (Scoones, 1998). Furthermore, "a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation" (Chambers and Conway, 1992: 6). Central to this concept is the notion of entitlement to access and use of different resources (Sen, 1991). These resources, also termed 'capital' or 'assets,' have been classified into five main categories: human, natural, social, financial, and physical (DFID, 1999). Later, Gaillard and Cadag (2009) pinpoint the significance of political resources, and some also identify cultural resources (Daskon and Binns, 2010).

In the face of disaster, the aptitude to rapidly and adequately mobilise livelihood resources guides people's capacity of coping and recovering. For those impacted, livelihood strategies require the use of existing resources and/or modification of their behaviour (e.g. utilising savings, changing diet, and reducing daily expenses) (Gaillard et al., 2009). Households may also claim new resources and/or intensify existing ones, such as requesting or reallocating bank loans, asking for government support, accessing Non Governmental Organisations' (NGO's) aid and the use of remittances (Ellis, 1998). The capacity to claim and access resources is based on notions of rights, power relationships, moral obligations, and generally depend on people's social, economic, and political

networks (Sen, 1991). In adopting particular livelihood strategies, people try to attain different short-term coping and long-term recovery objectives (Adams et al., 1998). Ashley and Carney (1999) identify five main desired livelihood outcomes, including (a) food security, (b) reduction of vulnerability, (c) increase of well-being, comprising self-esteem, conservation of cultural heritage, and sense of inclusion, (d) accumulation of income and economic sustainability, and (e) more sustainable utilisation of natural resources. Moreover, a livelihood strategy is effective if it does not negatively affect households' security and contributes to vulnerability reduction (Adams et al., 1998). In turn, it is unsuccessful when "both short- and long-term objectives are sacrificed in the struggle for survival" (Corbett, 1988: 265) and lead to undesirable livelihood outcomes, such as food insecurity, destitution, forced migration, and entering into unwanted activities (Le Billon, 2000).

Understanding people's access to and use of resources as well as the strategies they adopt to face disasters is fundamental for reducing the risk of disaster and improving humanitarian assistance, as a fundamental question is when and how to support people's existing and future livelihoods (Schafer, 2002). Remittances are an important component of households' livelihood strategies, both to make a living and to deal with natural hazards (Deshingkar and Aheeyar, 2006; Suleri and Savage, 2006). They are part of people's financial resources, sometimes being one of their main sources of income (Connell and Brown, 2005; Wu, 2006). In addition, remittances constitute a social resource, as they involve people's social networks and are based on kinship relationships and notion of reciprocity (Marsters et al., 2006). Indeed, remittances involve not only money, but also have implications in terms of maintenance of traditional customs, expression of cultural values, and contribution to well-being, aspects which are often neglected by economic-based approaches since they often fail to integrate people's perceptions, feelings, and meanings related to such practice (Le Dé et al., 2013). Sustainable livelihood approaches seek to be more cognisant of people's realities, by taking into account local specificities, and trying to focus on individuals and communities' strength rather than their needs (Scoones, 2009). Such a perspective implies the participation of local communities in the research

process, as no one is better placed than those directly concerned to identify their own resources, abilities, and priorities (Gaillard and Maceda, 2009). Participatory approaches and methods are increasingly used in Community-Based Disaster Risk Reduction (CBDRR) and Community-Based Disaster Management (CBDM). A participatory approach has been used in this study and will be briefly described in the following section.

### **5.3 Methodological approach**

Samoan society is based on a chiefly (matai) political system existing at both village and national levels. Conducting research with disaster-impacted communities required following local procedures and respecting cultural ethics. Hence, the project received acceptance from the relevant ministries. The Ministry of Women, Community and Social Development (MWCSO) informed the villages' chiefs of the research. This process was facilitated by the National Disaster Management Office (NDMO), which supported the project and helped with the choice of the communities. Five coastal communities were selected, namely Saleapaga, Salani, Poutasi, Tafitoala, and Faleu (see Figure 5.1). These villages share similarities in terms of socioeconomic levels, but Saleapaga and Poutasi experienced more fatalities than the other communities. Fieldwork took place between 2012 and 2013, involving eighty-two semi-structured interviews. An attempt was made to interview a similar number of disaster-affected households in each village. In lower-scale impacted communities such as Salani and Faleu, it meant interviewing all the households affected. In the other villages, households were interviewed according to a random sampling method. Participatory activities were then carried out with local communities. Both qualitative and quantitative data were generated using participatory tools, including carousel activities, proportional piling, timeline with scoring technique, and matrix scoring methods. However, because of divergent views on the research from different stakeholders, participatory activities were then limited to the four villages located in Upolu. In parallel, semi-structured interviews were undertaken with financial institutions and money transfer

agents [e.g. Central Bank of Samoa (CBS), Western Union], international NGOs (e.g. Oxfam, Red Cross), local NGOs (e.g. Women in Business Development, Samoa Umbrella for Non-Government Organisations), and government officials from the NDMO, the MWCSO, and the Seasonal Employment Unit (SEU). The next section will present some of the results of this research project.

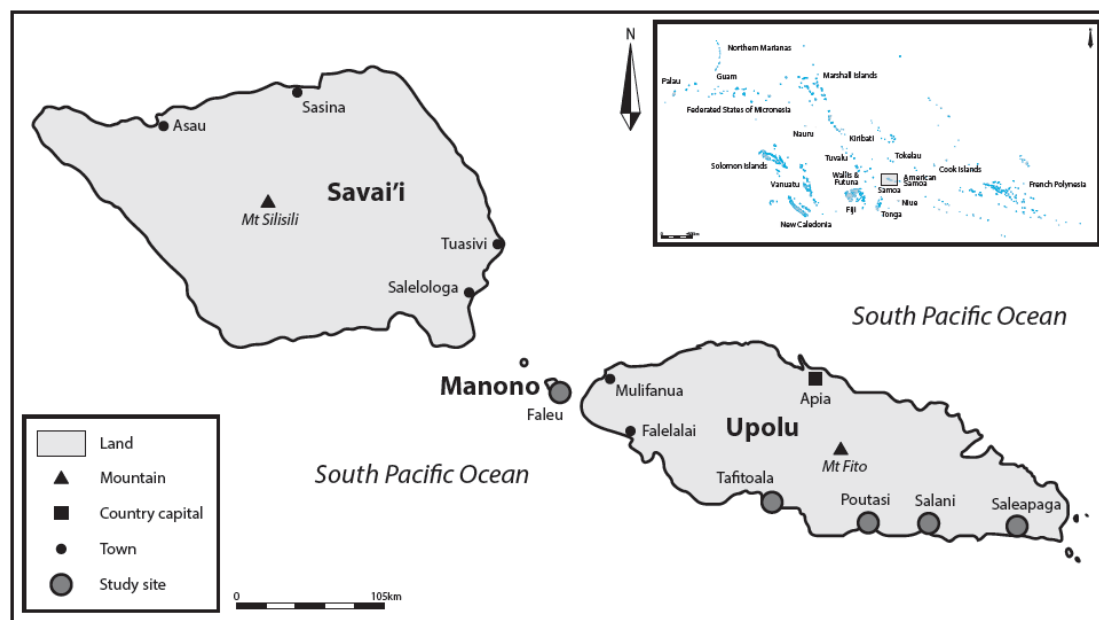
## 5.4 Results: remittances patterns

### 5.4.1 How fast are remittances in reaching those affected?

#### 5.4.1.1 Speed of remittances

During disasters, immediate availability of remittances may be crucial for those affected, especially when external aid arrives days or weeks after the event (Deshingkar and Aheeyar, 2006).

Figure 5.1: Study sites in Samoa



Indeed, the first step was to establish how rapidly remittances reached the

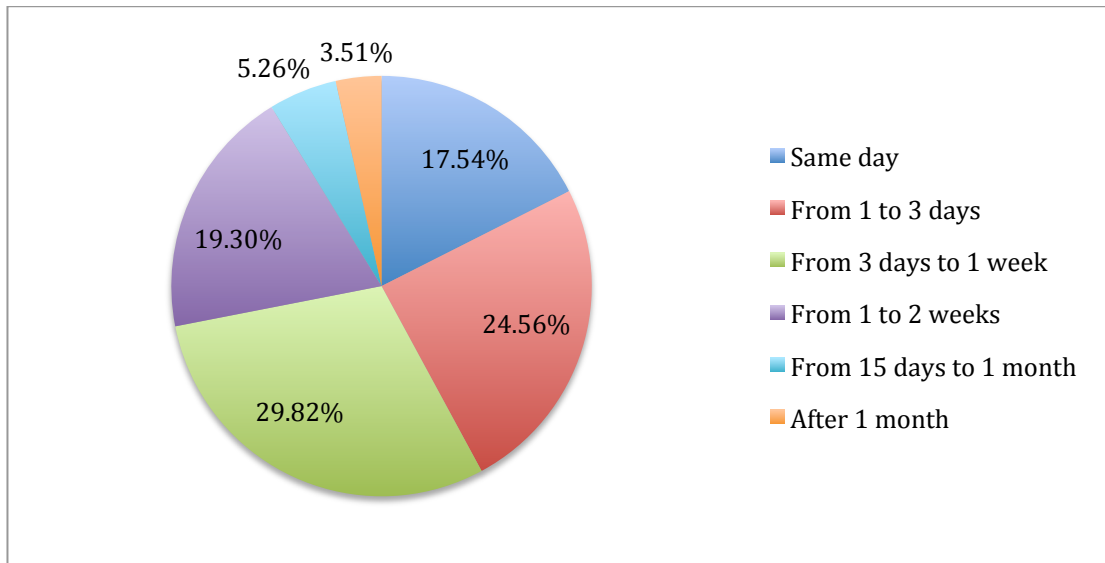
households impacted by the tsunami, being a function of the speed with which remitters send remittances and the difficulties experienced by affected households in accessing them. The tsunami of 2009 hit Samoa in the early morning on September 29, 2009. The South coast of Upolu was the main zone affected, but Apia, where all the banks and money transfer agents of Upolu are located, was not impacted. Based on eighty-two semi-structured interviews, 90.24% of households declared that they received remittances. From 57 of these disaster-affected households, 17.54% asserted that they could access remittances the same day, 24.56% from 1 to 3 days following the tsunami and 29.82% from 3 days to 1 week after the event (Figure 5.2). In total, 71.93% of disaster-impacted households received remittances within a week after the disaster occurrence. In all the cases, the channels used were the same as before the disaster, being principally money transfer agents. The most cited by interviewees was Western Union (25.61%), followed by Pacific Ezymoney (23.17%), Ink Patch Money Transfer (6.10%), Imex Money Transfer (6.10%), and Samoa Finance (3.66%). According to the CBS, money transfer agents represent about 70% of remittances sent via the formal channel, while 30% are sent through the banking system (CBS, personal communication). Interviews highlighted that because the same channels as before the disaster were utilised, people received remittances even though no communication had been established with their family members overseas. Many of the interviewees explained that their relatives knew from the media that they had been affected, and thus, remittances were immediately sent in the hours or days following the event. On the other hand, some interviewees from less impacted villages reported that no remittances were received rapidly, as their family members living overseas were not informed that their particular area had been affected.

#### *5.4.1.2 Difficulties in accessing remittances and external aid*

Although both the government and international organisations were very fast in providing assistance, people immediately tried to call overseas or travel to the capital to access remittances.



Figure 5.2: Speed of remittances after the tsunami of 2009



Source semi-structured interviews (n = 57)

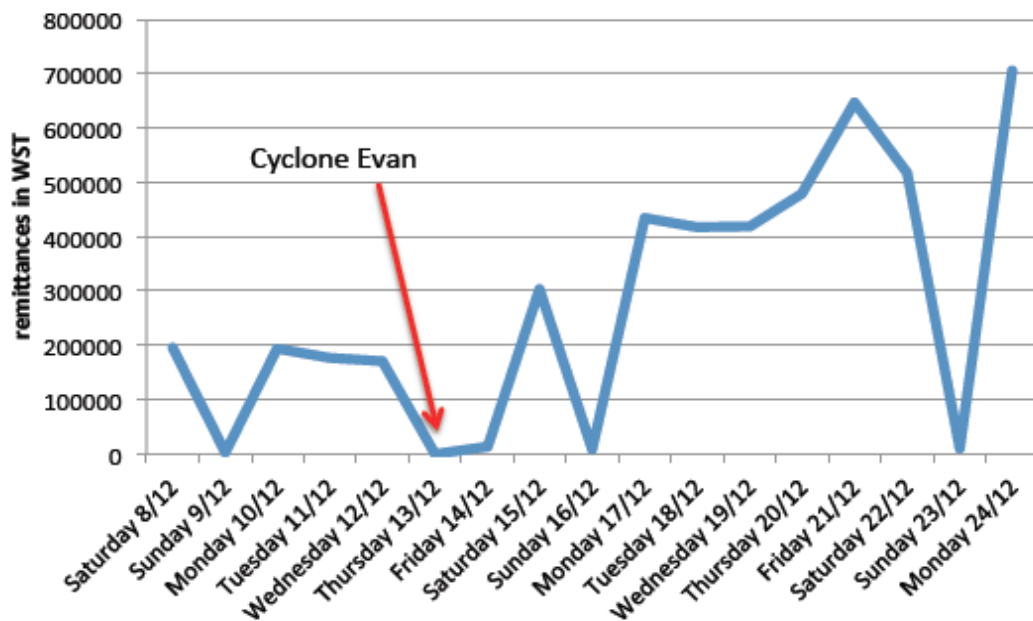
Households explained that one of their first reactions was to access remittances, as they knew that they could rely on their kin. They also emphasised that government and NGOs assistance were not always received in enough quantity or it did not fit with their needs. Because Apia was not impacted by the tsunami, there was no disruption of the financial system. Difficulties in accessing remittances were mainly linked to the loss of cell phones and the breakdown of the telecommunication system, rendering communication with families overseas difficult. The road system was also seriously impacted, making the transport to Apia, where all the money transfer agents and banks are situated, difficult. About 23.17% of interviewees declared that they had problems in accessing remittances during the tsunami, and all of them felt that there was no policy in place to facilitate this access. The Red Cross provided satellite communication and transport to those in need, as part of the Restoring Family Links programme. This programme is also set up for those affected to send messages overseas, but no money can be sent. However, none of the interviewees nor FG participants mentioned their access to this facility. In most cases, people themselves overcame the difficulties in accessing remittances. Interviews show that about 53.85% of disaster-affected households borrowed cell phones from relatives or

friends, 30.77% went to Apia to make phone calls or directly access remittances because they knew that the money would be sent, and 15.38% used the phones provided by Digicel, the first cell phone operator in Samoa (based on 78 respondents). Following the disaster, Digicel gave cell phones to disaster-affected households as well as a service of free calls overseas in the month following the event. Most households emphasised that this service was very useful both immediately after the disaster, but also in the long term to regularly inform relatives based overseas on their difficulties and recovery progress. Additionally, the general manager of Western Union explained that a 'no fees policy' on remittances transfers was set up during the month following the tsunami. Furthermore, an agreement between Samoa and New Zealand allowed Samoans to come and stay for a month to support their relatives. According to households, this measure provided great emotional support and certainly facilitated alternative channels for remittances such as cash and goods.

#### *5.4.1.3 Cyclone Evan and 'new' remittances channels*

More recently, on December 13, 2012, cyclone Evan impacted Samoa, with total damages estimated to be US\$ 203.9 million (GoS, 2013). The cyclone did not only affect communities located on the South coast of Upolu, but also seriously impacted Apia.

Figure 5.3: Western Union remittances inflow before, during, and after cyclone Evan [in WST The (Western) Samoan Tala is the national currency (1 WST = US\$ 0.426)]



Source: Western Union, Samoa

Figure 5.3 shows the remittances inflows of Western Union, the main money transfer agent in Samoa, before, during, and after cyclone Evan. The general manager of Western Union explained that in the capital, the financial system was disrupted and remittances could only be accessed the third day after the event, from the Saturday December 15, featuring remittances levels about 55% higher than the preceding Saturday. Money transfer agents are closed on Sundays, thus no remittances are accessible that day. However, the volume of remittances inflows on the 10 days following cyclone Evan was 92% more than that of the 10 days preceding the event. Although these data might be biased because Christmas time generally records the highest annual remittances level, Figure 5.3 confirms the high levels and fluctuations of remittances when disasters happen. According to the general manager of Western Union, such an increase was largely due to the cyclone (Western Union, personal communication). Since the

tsunami, new channels have appeared in Samoa. Digicel launched its Mobile Money service in October 2011, permitting users to transfer money, pay bills, purchase items, or simply save remittances for future use (Dalberg, 2012). However, very few households stated that they had used this facility during cyclone Evan. On the other hand, varied households noted their increasing use of a system permitting migrants based in Australia and New Zealand to shop online according to a list of items available in Samoa. These items include food and furniture and are then collected by Samoans in Apia.

*5.4.2 In which proportion and for how long do remittances support disaster-affected households?*

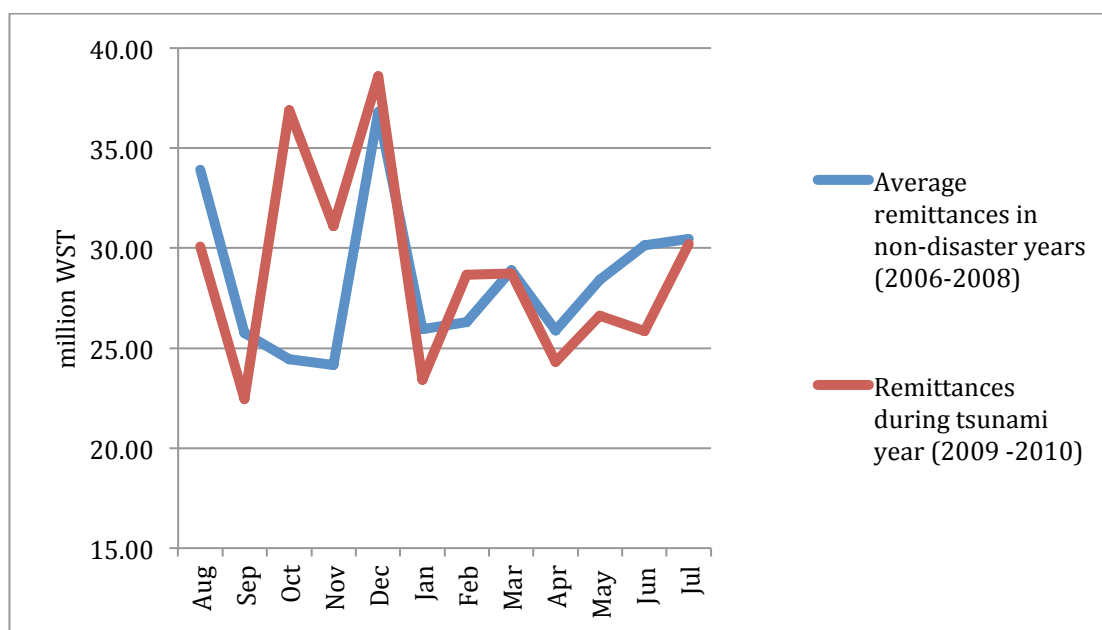
Usually, studies investigating remittances in the context of disasters are based on economic data at national and/or global levels (Mohapatra et al., 2009; Ratha, 2005). Moreover, most of them focus on the importance of financial fluctuations during crisis. However, this approach is limited in its ability to identify more detailed patterns of remittances, such as after a disaster occurring in a particular area of a country. Secondly, information is generally lacking on the longer-term flow and role of remittances. Indeed, this research aimed at exploring at what scale and for how long did disaster-affected households receive remittances after the tsunami.

Table 5.1: Remittances received monthly by households in normal times (based on a 12-month period)

Monthly remittances	Per cent (%)
Less than US\$ 100	18.75
From US\$ 100 to 300	56.25
More than US\$ 300	25

Source semi-structured interviews (n = 32)

Figure 5.4: National remittances during tsunami year (2009–2010) and non-disaster year (2006–2008) (in million WST)

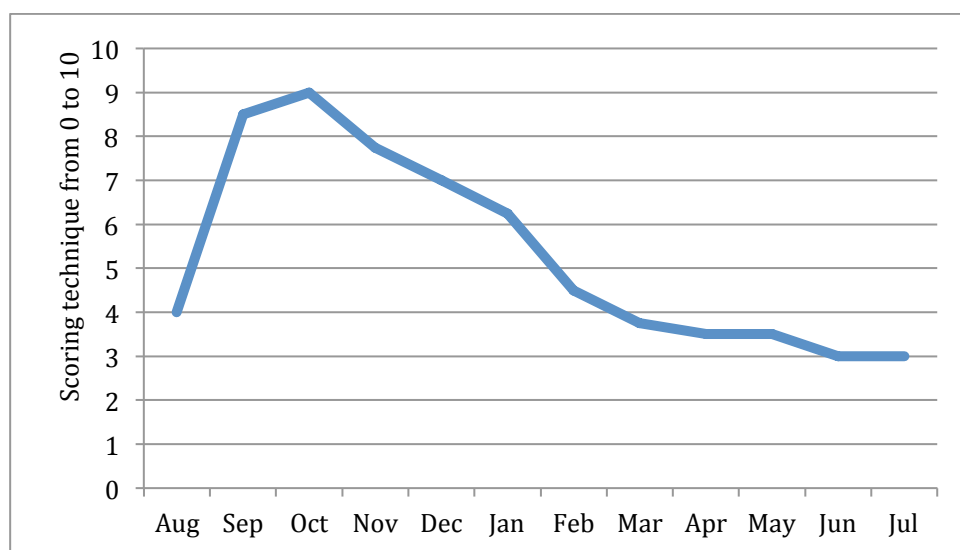


Source: Central Bank of Samoa

The amount of remittances received following the tsunami varied greatly among households. Disparities were also observed during non-disaster years, with households receiving from US\$ 10 to US\$ 1300 per month (calculated on a 12-month period). Table 5.1 provides an estimate of the average monthly remittances received in normal times. More than 56.25% of households got between US\$ 100 and US\$ 300 per month, 18.75% received less than US\$ 100 and about 25% more than US\$ 300. These results are quite consistent with a study done on a larger scale by Shuaib (2008). Available data from the CBS show the evolution of national remittances during the 11 months following the tsunami (see Figure 5.4). This record includes four commercial banks and twelve registered money transfer agents. CBS records indicate that between September and October 2009 remittances increased by 64%. If comparing this information with the average remittances from 2006 to 2008, when no disaster was reported, it can be inferred that such variation is certainly related to the tsunami occurrence. Figure 5.4 shows that remittance levels decrease in November and

are again augmented for the month of December 2009. However, this rise cannot be attributed solely to the tsunami since December, because of remittances related to Christmas, is the month of the year when remittance flows are the most elevated nationwide. Given that 'only' 3% of the population was impacted by the tsunami, it is hard to evaluate the scale of remittances directed to the disaster-affected people in these data. On the other hand, Figure 5.5 presents the data obtained via timeline activities and scoring techniques with disaster-impacted people. In groups of 4–6 people, participants scored the significance of remittances from 0 (no remittances received) to 10 (maximum remittances received) for each month of the timeline. Scores were given after consensus was reached among the participants, implying multiple discussions, debates, and cross-verification of the information delivered. Rather than quantifying remittances with a monetary value, we aimed at understanding how remittances, after the disaster, fluctuated through time. Remittances increased significantly for the month of September, indicating that many households received migrants' support immediately after the tsunami.

Figure 5.5: Remittances in the disaster-affected area from August 2009 to July 2010



Source: participatory timeline activity using scoring technique from 0 to 10

Highest records are observed in October and then slowly decrease until coming back to normal levels around February to March 2010. Indeed, migrants sent remittances in higher proportions than normal years during 6–7 months following the tsunami. Contrasting with remittances patterns observed at national level (Figure 5.4), tsunami-impacted households received fewer remittances in December 2009. FG participants explained that most remitters put all their efforts into supporting their relatives immediately after the disaster, thus limiting their ability to afford the usual Christmas remittances. When investigating why remittances increased for 6–7 months until coming back to standard levels, people explained that this was the duration necessary to cope with the disaster and come back to some form of ‘normal livelihood’. However, most households emphasised that the recovery took them at least a year, while others, 3 years after the event, affirmed that they never really recovered.

Further discussions with local communities indicated that affected households did not want to ask for more remittances from their family members because they are aware of the cost of living in countries like New Zealand, Australia, and the US, and knew about the economic difficulties that it might imply for migrants. For example, in New Zealand where most of overseas Samoans live, the unemployment rate of Samoans (10.3%) is twice as high as the rest of the New Zealand population (5.0%). Besides, Samoans residing in New Zealand are mainly labourers (19%) and machinery operators and drivers (15%), generally low-paid jobs (Statistics New Zealand, 2007). Remittances mechanisms are also contingent on different constraints and limitations placed on the remitters. The level of income, unemployment rate, and economic context in host countries are different elements affecting migrants’ ability to further support their relatives in time of crisis (Hammond, 2011; Ratha and Sirkeci, 2010). 2009 was the year following the global crisis and was the only time in the last thirty years that remittances decreased worldwide (World Bank, 2012). Countries like the US but also New Zealand and Australia were severely affected by this financial crisis, thus certainly limiting remitters’ capability to support their relatives in Samoa. Furthermore, Samoans migrating abroad temporarily and seasonally are generally low-skilled workers (SEU, personal communication). Those who live

permanently in New Zealand and Australia are also part of the low-skilled labour force (Stahl and Appleyard, 2007). Indeed, these elements contribute to the ability (or not) of remitters to send higher amount of remittances in the long term. Moreover, FG discussions highlighted that for households who only have one family member living overseas, remittances were generally not received in large amounts or for a long time, as a result of the financial pressure placed on the remitter. This further questions the implications that sending remittances in time of disaster have for the senders, and whether or not it increases their vulnerability. However, the ability of the remitters in sending remittances is not the only factor influencing remittances levels through time. In some communities, disaster-impacted households claimed receiving lower levels of remittances in the long term because other resources could be accessed, including government and NGOs support. This will be discussed in the next section.

#### *5.4.3 Do remittances interact with external aid?*

Following the tsunami, the Government of Samoa (GOS), as well as local and international NGOs, provided both humanitarian assistance and long-term support to the impacted communities. During the year following the tsunami, the GOS funded a housing recovery programme under a Shelter Committee that defined a standard size open face (Samoan traditional building). The reconstruction plan provided 18,000 WST to those affected by the tsunami given in the form of a voucher to buy construction material (GOS, 2010). International NGOs such as Caritas and Latter Day Saints also funded a part of the housing reconstruction plan. The NGO Habitat for Humanity was appointed as the main housing builder by the GOS, providing free labour. A year after the tsunami, Habitat for Humanity was declaring that 95% of the house reconstruction was completed (Le Dé, 2011). For those affected, external assistance represented new resources that supplemented their existing sources of incomes. Since aid from the government and NGOs differed greatly among villages in terms of quantity, speed of availability, and duration of provision, the research tried to understand whether and how remittance flows were linked with this external



support. Because of the exogeneity of remittances, accurately discerning such causal relationships can be difficult. Hence, in order to provide some insights on the links between these resources and potential elements influencing remittances flows, FG discussions were carried out with those generating the quantitative data.

The villages of Poutasi and Salani were compared. In the former, many people died and about half of the village was totally destroyed. This situation greatly caught the attention of the media and both government support and international aid were very important. In the latter, no fatality was reported and 'only' fourteen families were impacted (GOS, 2010). Even though these fourteen families lost everything, local people acknowledged that the external aid appeared to be limited. Using scoring techniques, households from the two communities expressed the significance of remittances, NGOs aid and government support received for a 1-year period (Figures 5.6 and 5.7). The community of Poutasi indicated that they had received substantial remittances for the months of October and November together with NGOs and GOS assistance. In December, remittance levels dropped significantly compared to what it should be during this month, while external aid remained important. Government and NGOs support decreased in January but remained significant throughout the year, thus being more important resources than remittances. FG participants explained that they were regularly communicating with their families overseas, informing them of their good recovery and that the resources from the government and NGOs, together with their agricultural resources, were enough to face the disaster and recover. In contrast, the community of Salani indicated receiving important remittances immediately after the tsunami. Households explained that the telecommunication systems and infrastructure were affected to a lesser extent, thus allowing them to access remittances rapidly. However, according to local people, government and NGOs assistance were very little. Some households did not receive the 18,000 WST normally allocated from the GOS to rebuild their house, nor did they obtain much support from NGOs.

Figure 5.6: Remittances, NGOs, and government support in Poutasi village

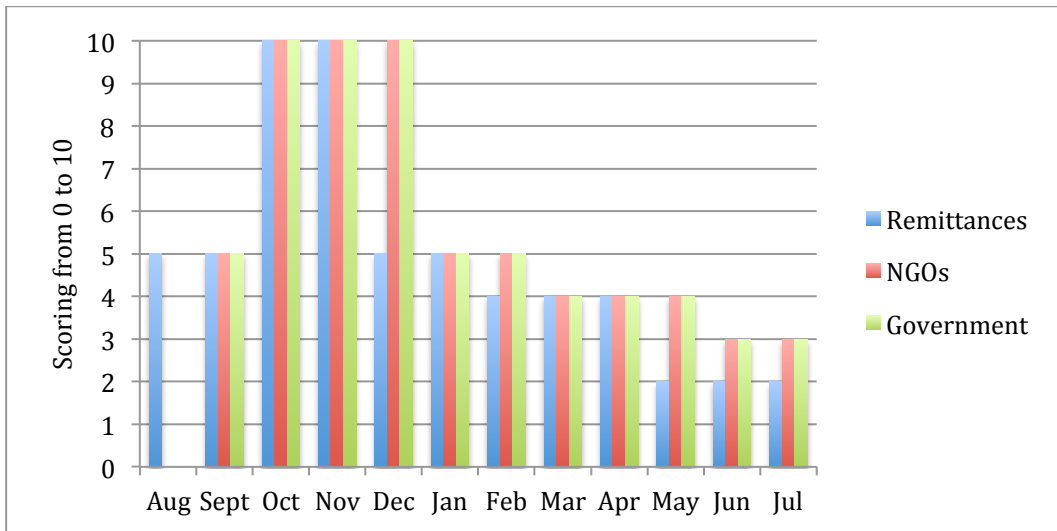
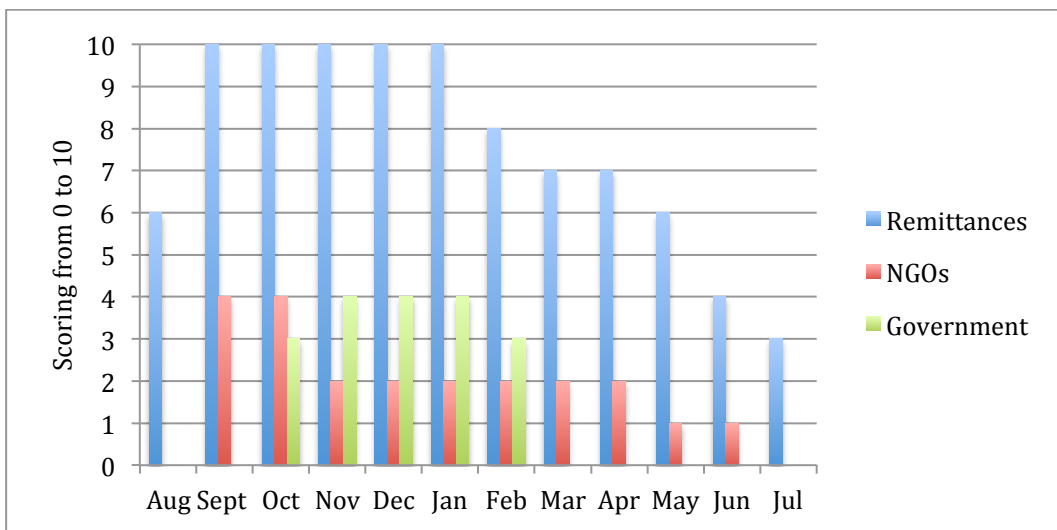


Figure 5.7: Remittances, NGOs, and government support in Salani village



Others claimed that external support directed to the rebuilding arrived very late. Indeed, family members living overseas helped to balance this lack of assistance, involving important flows of remittances during about 8 months following the event. A Samoan participant from Salani stated: “After the tsunami we lost everything. But we could count on our family overseas, and without remittances

it would have been very hard". The comparison between Figures 5.6 and 5.7 seems to demonstrate that remittance inflows are inversely linked to government and NGOs aid flows. When foreign and government aid is scarce, remittances increase, thus permitting households to absorb the shock related to the disaster and contributing to their livelihood recovery. Remittances somehow act as a private insurance system that helps in balancing the shortage of external aid. In the opposite case, results show that when foreign and government aid increases, remittances decrease. A macroeconomic study by Amuedo-Dorantes et al. (2007) on SIDS observes a similar relationship. However, the authors advance the hypothesis that the remitters may not directly react to foreign aid and government support, but may rather see "the time as inopportune for additional investments in the home community" and "are more likely to remit when exposure to economic risks are smaller" (Amuedo-Dorantes et al., 2007: 12).

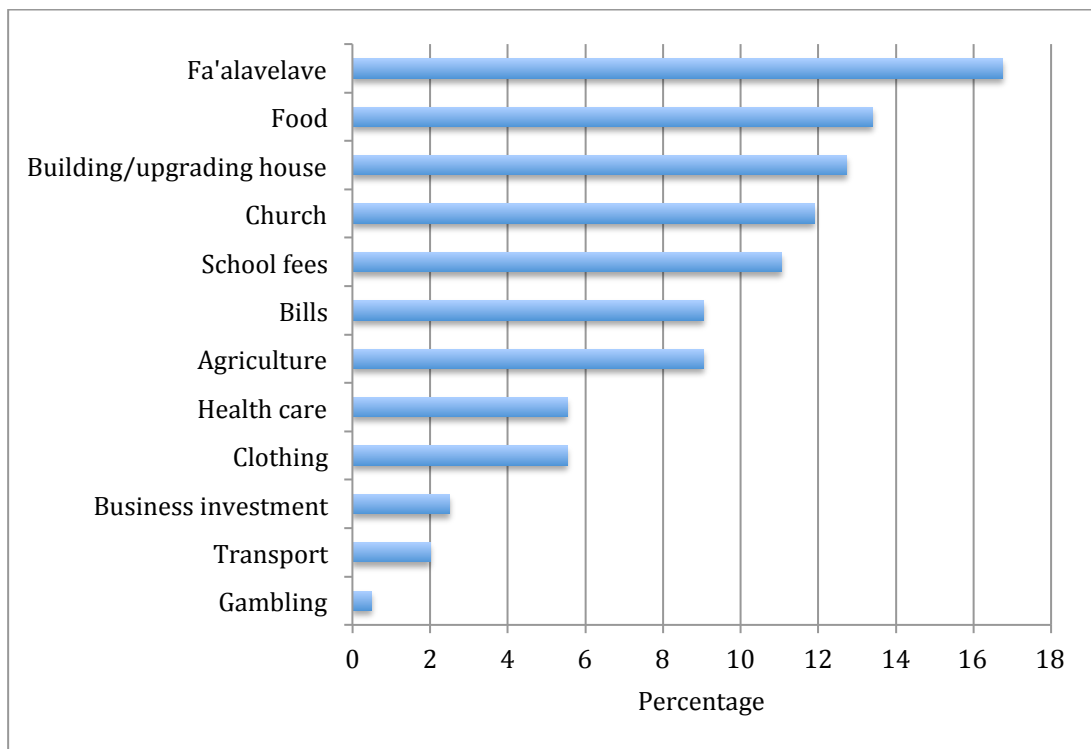
Our findings point out that remittances decrease when foreign and government aid are augmented because the new resources generated are sufficient for the impacted households to face the disaster. Indeed, the relationship between remittances and external aid must be understood from a livelihood perspective, where households combine remittances with and make trade-offs between their different resources in order to cope with and recover from disasters. Moreover, the argument of Amuedo-Dorantes et al. (2007) is quite representative of other economically based studies that perceive the remitter as a 'rational agent' who seeks to build a portfolio of assets in the home country (e.g. Bertram and Watters, 1986; Poirine, 1998). Of course, remittances practice can be seen as 'rational' in the sense that the remitters are somehow involved in the livelihood strategy of the recipient, such as in reacting positively or negatively to government and external aid. However, our results indicate that remitters are not trying to invest back home, but rather ensure that relatives are able to face the disaster and meet their daily needs. At the centre of this mechanism are the notions of service and obligation (*tautua*) from migrants toward the family (Morrison, 2008; Taufa, 2003). For community members, providing service to the family (and the village) is fundamental duty, central to the *fa'aSamoa* (Samoan way of life). While in Samoa people would have fulfilled their *tautua* by

working in the plantation, they nowadays provide service to their family through migration and remittances (Gough, 2006; Macpherson, 1994).

#### *5.4.4 What are remittances used for?*

Understanding how households use remittances both before and after disasters is a key issue. Proportional piling activities were undertaken with disaster-affected households. Results indicate that it is generally the recipient household head that decides on the allocation of remittances. Figure 5.8 shows how remittances were spent during the year preceding the tsunami. During normal times Samoan households mainly use remittances for cultural and religious purposes, and to meet daily needs. Local communities acknowledged spending about 17% of remittances for fa'alavelave. These are traditional practices at the core of the fa'aSamoa, encompassing weddings, funerals, elections, or bestowing of chiefly (matai) titles, as well as other customary ceremonies. A significant proportion of remittances is also allocated to church donations and related activities (12%). Religion plays a central role in shaping Samoan society and people's everyday lives (Thornton et al., 2010). This result fits with other studies emphasising the importance of the 'sociocultural use' of remittances in Samoa (Walker and Brown, 1995). In spending remittances on fa'alavelave and church, village members support the perpetuation of Samoan tradition and the maintenance of sociocultural practices and customs (Gough, 2006).

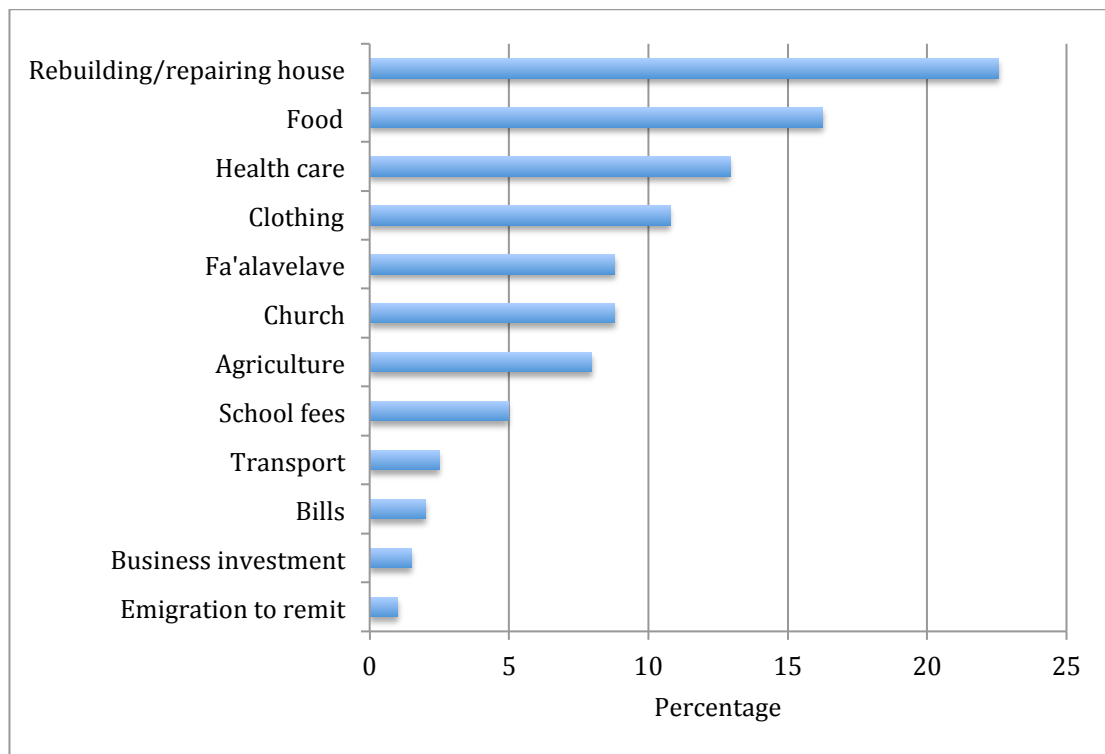
Figure 5.8: Utilisation of remittances during non-disaster year (before the tsunami)



This utilisation of remittances may also provide households with a certain social and political position within the community (Shankman, 1976). The other foremost uses of remittances relate to 'daily living', including food (13%), building or upgrading housing (13%), school fees (11%), bills (9%), investing in agricultural equipment (9%), clothing (6%), transport (2%), and gambling (1%). Additionally, findings demonstrate that remittances are very seldom used for small-business investment (3%). During interviews few households mentioned being able to save a part of the remittances received. Thus, savings do not appear in the result from participatory activities, first as it represents a very minor use of remittances, but also certainly because of the sensitivity in publicly sharing this type of information. Overall, these data are consistent with studies done in SIDS (Connell and Conway, 2000; Orozco, 2006), and elsewhere (Goldring, 2004; Lindley, 2006), emphasising that remittances are largely utilised for meeting households' everyday needs rather than for savings or business investment.

A similar participatory activity was carried out to understand how remittances are spent following a disaster. Figure 5.9 demonstrates that after the tsunami the greatest proportion was used to rebuild or repair impacted homes (22.5%). Even though most disaster-affected households received external support to rebuild their house, many of them highlighted that this was not enough and that remittances usually complemented this aid. Others pointed out that external aid arrived late and remittances allowed them to start rebuilding or repairing their home quickly. Remittances were then used for more immediate needs with 16% allocated to food expenses, 13% to health care and 11% to buy clothes. Compared with pre-disaster times, remittances were to a lesser extent utilised for fa'alavelave (9%) and church donations or related activities (9%). Households also limited their spending on schooling (5%) and bills payment (2%). FG participants explained that this was partly due to the disruption of school and electrical power services. On the other hand, the 'schooling' category also includes some households who decided to invest remittances in studies in order to work overseas and remit (e.g. seafarers) or to get a higher educational level to get a better-paid job. Furthermore, Figure 5.9 indicates that spending on agricultural equipment (8%) and transport (2.5%) remained relatively the same as before the tsunami. Findings demonstrate that very little remittances were allocated to invest in business (1.5%). Finally, about 1% of remittances were used to migrate with intention to remit. Overall, interviewees and FG participants receiving remittances pointed out the significant role of this mechanism both for short-term coping and longer-term recovery. Remittance receivers could deal more easily with food security issues and health care needs, as well as repairing or rebuilding their house more quickly.

Figure 5.9: Use of remittances following the tsunami



In contrast, non-recipient households or those receiving very small amounts experienced more difficulties and had to rely more on NGOs and GOS support. They also had to diversify to a greater extent their livelihood activities, such as looking for jobs in Apia or reducing their food intake. Nonetheless, the effects of remittances are not limited to the sole recipient's households and may benefit non-recipients too. For example, Netina who lives in Tafitoala and received substantial remittances following the tsunami reported that 1,000 WST was given to their neighbours who were struggling with the event. Similarly, after cyclone Evan, it was very common to see those who were dealing well with the event sharing food with other households experiencing more difficulties. Moreover, a woman interviewed in Poutasi explained that she lost her husband in the tsunami. Because her son was too young to take care of the plantation, remittances were (still at the time of the interview) used to pay a villager who was in charge of the households' agricultural production.

Remittances may also have an impact on the wider community (Lindley, 2007; Suleri and Savage, 2006). Our results show that a significant proportion of remittances were allocated to housing reconstruction. While Habitat for Humanity provided free labour for the rebuilding, remittances surely also generated employment at local level and boosted the national economy (e.g., material construction, transport). Additionally, in Samoa, it is the responsibility of village members to take care of some of the infrastructure of their village like schools, churches, and water supply systems. Since remittances were also used to cover these costs, those with less or no access to remittances were to some extent benefiting from this recovery. Similarly, community members spend remittances for fa'alavelave and other cultural purposes in relation to their financial capability. However, it is the whole community who benefits, in the sense that such remittances utilisation allows the maintenance of tradition and local customs. Indeed, the indirect impact related to the use of remittances is very hard to quantify. Remittances do not only help the receiver-households in dealing with disasters, but also have a positive effect on the larger community, including on those with no or reduced access to this resource.

#### *5.4.5 To what extent do remittances help households in achieving short-term coping and longer-term recovery objectives?*

Remittances are part of a portfolio of livelihood resources that households use in order to attain different short- and long-term goals. The research aimed to identify the role of remittances within this resource system in achieving different livelihood objectives. A primary activity was for the participants to list both their immediate objectives and longer term or recovery desired outcomes. For example, people identified getting water and food, having a shelter, cleaning the debris, repairing toilets, constructing a new house, and restarting agricultural production. These objectives were then allocated into categories defined by the researcher in relation to the existing literature and the information delivered by the participants during FG discussions. They were then disposed vertically in the matrix scoring (see Figure 5.10). To face the disaster, households used resources that are part of their everyday livelihood. The main resources included jobs,



agriculture, remittances, fishing, small business, and savings as identified by households themselves in an earlier participatory activity. When the tsunami occurred, new resources were claimed, comprising government support, NGOs aid, and credit. These main resources were positioned horizontally in the matrix. Households were then provided with 30 stones to be allocated proportionally to the resources used to attain coping and recovery goals.

Figure 5.10: Households' resources utilised to attain livelihood objectives

Resources	Jobs	Agriculture	Remittances	Fishing	Small business	Government support	NGOs aid	Savings spending	Credit
Timely available	• •• (2.74)	•• •••• (5.11)	•• •••• (5.11)	•• (2.05)	•• (2.05)	• •• (2.39)	• •• (3.07)	• ••• (4.09)	• •• (3.41)
Provides us with access to health care	•• ••• (4.83)	•• •••• (5.17)	• ••• (4.48)	•• (2.07)	•• (2.41)	• ••• (4.14)	• ••• (4.14)	•• (2.07)	• (0.69)
Helps us coping with disaster	• (1.05)	• •• (3.14)	• •• (7.32)	•• (2.44)	•• (1.74)	• ••• (6.28)	• ••• (6.63)	• (0.70)	• (0.70)
Helps us avoiding modifying our livelihood	•• (2.05)	• ••• (4.09)	• •• (5.80)	••• (2.73)	••• (2.73)	•• (2.39)	• ••• (4.43)	• ••• (3.75)	•• (2.05)
Helps us to fast and good recovery	• ••• (3.79)	• •• (6.55)	•• ••• (4.83)	•• (1.72)	• (1.38)	• •• (6.21)	•• (2.41)	•• (1.72)	• (1.38)
Helps us invigorating our livelihood	• ••• (3.75)	• ••• (3.75)	• •• (5.46)	• •• (3.41)	•• (2.05)	•• ••• (5.11)	•• ••• (5.11)	• (0.68)	• (0.68)
Overall preference	• (1.33)	• •• (7.00)	•• ••• (8.67)	•• ••• (4.67)	•• ••• (2.00)	•• (3.33)	•• (1.67)	(0.00)	• (1.33)

Source: Matrix scoring. The dots represent the stones allocated to participants (the red colour highlights the main resource used to attain each objective)

Remittances were identified as one of the most important resources in coping with the tsunami. While government and NGOs assistance were crucial in dealing

with security issues, households also explained that items delivered were sometimes duplicated or non adapted to their requirements. In contrast, remittances fit with their needs as, on one hand the goods sent or brought by their relatives generally resulted from phone communication, and on the other hand the money received allowed them to use it to fulfil their specific needs. Moreover, local communities asserted that remittances were available very quickly, and FG participants cited this element as an important aspect of successful coping. Households highlighted their obligation to adopt different coping strategies in order to deal with the disaster. These livelihood modifications and strategies included reducing food intake and/or skipping meals, doing handicrafts, migrating temporarily, and asking neighbours for support. Thus, results indicate that remittances were central for households in avoiding the modification of their livelihood. While remittance receivers could absorb the disaster shock, non-recipients were in the majority those struggling the most and forced to alter their livelihood. Remittances were also a critical resource to help households invigorate their livelihood or returning to 'normal life'. People could start agricultural and/or fishing activities again, with remittances allowing them to buy farming tools and chemicals, fishing gear, and other equipment lost in the disaster. Lastly, remittances were identified as the resource that local communities overall prefer. The first reason for this was related to their flexibility of use, permitting people to deliberately choose how to utilise this resource. This flexibility was not always possible with sometimes-constraining recovery programmes that require households to fit into 'rigid boxes'. Secondly, people argued that remittances are part of a culturally accepted practice, which is rooted in Samoan society and its norms of gift giving. Households asserted that it is a way to show your reciprocal love (*meaalofa*), and that remittances acted as a catalyst that strengthened the ties existing with their relatives living overseas. Thirdly, people underscored the positive character of such a mechanism. Households explained that remittances and the elements surrounding this practice (phone and Internet communications with family overseas and/or relatives visiting them following the event) were also a great moral and emotional support. Moreover, disaster-impacted households insisted on the positive dimension of remittances practice that helped them to cope with

the disaster by themselves, rather than relying on some external aid.

### **5.5 Remittances as powerful mechanism to face disasters**

The ability of people in mobilising their resources guides their success (or failure) in overcoming disasters (Scoones, 1998). In time of disasters, people may pursue short-term coping objectives, which are linked to basic and security needs (Adams et al., 1998). In the long term, people may try to reinforce their assets, reduce their vulnerability to future shocks and stresses, maintain their cultural heritage, and secure their general well-being (DFID, 1999). Findings stress that remittances were very important for households to achieve both short-term coping and long-term recovery objectives. During the pre-disaster year, remittances were mainly used for daily consumption needs and for cultural purposes, thus corroborating the conclusions from other studies (Brown and Ahlburg, 1999). When the disaster happened, remittances were mostly directed to deal with immediate security needs and to recover. Households used remittances for health care, to get food, buy clothes and rebuild their houses, rather than spending them on fa'alavelave, church, schooling, and bills. This denotes the contribution of remittances for households to successfully cope and adapt, in the sense that this livelihood strategy helps increasing people's security and reduces their vulnerability (Hussein et al., 1998). Second, this highlights the flexibility of remittances and how such a resource can be adjusted to households' necessities in time of hardship. Furthermore, remittances may complement external aid (e.g., pre-defined homes), thus allowing people to recover in function of their physical, social, and cultural needs and desires. Hence, households choose to use remittances in relation to what they perceive as their priorities, which aspects are central to good recovery (Barakat, 2003; Oliver-Smith, 1990).

Households utilise remittances in combination with their livelihood resources, including those claimed in time of crisis. For example, remittances increased and remain high through time when external assistance was limited. In contrast, they

decreased when households received enough foreign and government aid to face the disaster. Indeed, remittances interact with the resources that form part of the broader livelihood system of households. They are flexible and thus serve as buffers for each other. In this management of the livelihood system, migrants play a crucial role, as they constantly communicate with their family back home, who inform them of their needs. Results demonstrate the efficiency of this mechanism, with migrants quickly sending high amount of remittances after a disaster and supporting their kin in the long term if required. Of course, the strength of this mechanism depends on the ability of migrants to support their kin. The number of relatives living overseas and their level of income, as well as more exogenous factors such as the impact of the global crisis, are different elements influencing the capacity of migrants to remit. Nonetheless, the effectiveness of remittances largely contrasts with the mainstream discourse on disaster and vulnerability that portrays local communities as helpless 'victims' in needs of external help (Bankoff, 2001; Furedi, 2007; Heijmans, 2004). Remittances also have implications in terms of self-esteem and well-being. Communities perceive them as positive, as they are based on their own strength rather than some external support. Thus, this practice somehow balances the power relationship generally existing between external aid and those receiving assistance. The anthropological work of Mauss (1970) and then Harrell-Bond (2002; Harrell-Bond et al., 1992) have been critical about the norms of charity and gift giving that dominate humanitarian assistance. Harrell-Bond et al. (1992) claim that within this approach there is no gift-giving reciprocity possible, and thus, the recipient is in an inferior position in relation to the aid provider. Moreover, in such an approach, disaster-affected people are perceived in terms of their needs rather than their strengths (Horst, 2008). With remittances, disaster-affected people are not powerless victims limited only to a role of aid recipient, but throughout their kinship networks are also providers of assistance. Likewise, remittances are not just significant financial resources that households use to absorb shocks and reduce their vulnerability to future disasters, but through communication and sharing, remittances contribute to the well-being of both remitters and recipients (Hammond, 2011; Marsters et al., 2006). Thus, remittances are also the expression of communities' social and cultural capitals,

which may even be strengthened by this practice when disasters happen. These elements are other important outcomes of livelihood strategies as they permit the maintenance of people's identity and their cultural practices. Beyond being meaningful for local communities, the maintenance of these mechanisms and forms of identity are 'enabling and empowering' (Bebbington, 1999: 2034). Thus, if the purpose is to strengthen local communities' capacities to face disasters and reduce the risk of disaster, it therefore appears essential for aid actors to build on this culturally accepted mechanism.

## **5.6 Closing statement**

Nowadays, it is recognised that reducing vulnerability to natural hazards necessitates building on the resources that are endogenous to communities, in ways that are culturally, socially, and economically acceptable and sustainable (Gaillard and Mercer, 2012). This requires the involvement of local people in the evaluation of their needs and priorities, and in the means to sustain them efficiently (Wisner, 2006). In Samoa, remittances are one of the most important mechanisms utilised to achieve both short-term coping and longer-term recovery objectives. Local communities see remittances as efficient because they are flexible and fast in reaching them, culturally accepted because they are embedded in their daily livelihood, and positive as they are based on their own strength rather than some external help. In the face of disasters, households with access to remittances could deal more easily with food security problems and health care needs. They could also recover better, such as in rebuilding or fixing their house more rapidly and regenerating a 'normal livelihood'. Remittances have other livelihood outcomes, including households' self esteem and sense of well-being. Additionally, this practice generates less quantifiable effects on the wider community, such as perpetuation of tradition and cultural practices, thus being different elements that strengthen local coping capacities and contribute to reduce vulnerability (Bebbington, 1999; Sen, 1997). Indeed, a better understanding from aid actors of this mechanism seems indispensable. NGOs and governments should include remittances in their relief actions and recovery

programmes to enhance this households-based mechanism. The private sector, such as money transfer agents, the banking system, and telecommunication companies, also have a role to play. Finally, governments and aid agencies should include remittances in their post-disaster need assessments and programmes, in order to better support those with no or limited access to this resource. It does not mean that households with remittances should receive less aid, but further attention should be paid to non-recipients.

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## Chapter 6 Poverty and disasters: do remittances reproduce vulnerability?

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Le Dé L., Gaillard J. C. and Friesen W. (2015). Poverty and disasters: Do remittances reproduce vulnerability? *Journal of Development Studies* (in press).

### **Abstract**

In many low-income countries, remittances are important in sustaining people's livelihood and become even more significant during disasters. Meanwhile, the literature suggests that remittances are mainly accessible to middle and upper-income households, rather than to the poorest, thus implying differential capacities amongst households to overcome crises. The present study uses cyclone Evan that hit Samoa in December 2012 as a case study to test this hypothesis. It focuses on the village of Tafitoala and draws on interviews and participatory activities undertaken with the poorest households of the community. It indicates that the poor receive little to no remittances and that they struggled more than the rest of the community to cope with and recover from the cyclone. Their lack of access to remittances had negative consequences on the security and sustainability of their livelihoods. We conclude that remittances reproduce or even increase both inequalities and vulnerabilities existing within the community of origin.

Keywords: disaster – poverty – remittances – sustainable livelihood – vulnerability

## 6.1 Introduction

Over the last two decades, remittance flows to the least wealthy nations have been considerably augmented. Remittances are a livelihood diversification strategy that people use to deal with their everyday struggles (Vargas-Lundius et al., 2008). They often contribute to the fulfilment of basic needs such as purchasing food, housing, equipment, and paying education fees (Lindley, 2006). Adams and Page (2005) underline that remittances may reduce the level, depth, and severity of poverty. Furthermore, the literature increasingly points out the noteworthy function of remittances in the face of disasters (Le Dé et al., 2013). For example, after the earthquake of 2005 in Afghanistan, remittances receivers could more rapidly rebuild their house and pay for private health care (Suleri and Savage, 2006). Likewise, Mohapatra et al. (2009) demonstrate that Ethiopian households getting remittances could use cash reserves to face shocks to food security, whilst those without remittances were forced to sell their livestock. Indeed, remittances have often been described as a kind of self-insurance (Yang and Choi, 2007). Households receiving remittances seem to better respond to and recover from disasters than non-recipients do (Deshingkar and Aheeyar, 2006). Overall, access to such a mechanism implies a greater capacity to deal with natural hazards and a propensity to reduce vulnerability to disaster (Savage and Harvey, 2007).

At the same time, different studies suggest that remittances may reproduce the inequalities existing in the community of origin (Lipton, 1980). For example, Mazzucato et al. (2008) show that in Ghana only 5% of remittances accrue to the poorest 20% of the population, while most remittances (57%) go to the richest 20% of the population. Similarly, Taylor et al. (2005) argue that because remittances are dependent on households getting access to labour markets overseas, transnational remittances are likely to be mainly received by middle and upper-income families. Yet, limited studies address the links between pre- and post-disaster vulnerability in relation to remittances access, or how the limited access to remittances affects people's ability to recover from a disaster.

This article focuses on the poorest households within the community of Tafitoala in Samoa and uses cyclone Evan that hit the country in 2012 as a case study. It investigates how significant remittances were for them compared to the rest of the community; what the implications in terms of livelihood strategies and capacity to cope with and recover from the event were; and ultimately what the effects were of these remittances on their vulnerability. A sustainable livelihood approach is used. Such an approach aims at understanding people's means of making a living and their capability to maintain or enhance these means in the long-term, including in the face of disasters (Chambers and Conway, 1992). Tafitoala is composed of 70 households (about 450 people), and is located on Upolu, one of the two main islands composing Samoa. Remittances often play a significant role for Samoan households both on a day-to-day basis and in time of disaster (Shuaib, 2008). Since the 1990s, Tafitoala village has recurrently experienced disasters, including cyclones Ofa and Val occurring in 1990 and 1991, and the tsunami of 2009. In December 2012, the community of Tafitoala was badly affected by cyclone Evan, considered to be one of the worst tropical cyclones to hit Samoa in the last 20 years (GOS, 2013). This paper presents and discusses the data collected from research using participatory techniques with disaster-affected households identified as poor in the community by two key informants (village chief and pastor) and the people themselves. In Samoa, and more generally in the Pacific, poverty is not as perceptible as it can be in other parts of the world. Nonetheless, it is estimated that about 20% of Samoan households struggle to deal with their basic requirements and that 8% of households cannot meet the cost of their daily basic diet needs (Muagututi'a, 2006). As stated by the Samoa National Development Report (SNDR), poverty is "quite a new public concern in Samoa" and "has been less recognised before" (Muagututi'a, 2006). The following section will provide a short background on the concepts of vulnerability and livelihood, as well as a concise overview of remittances in the context of livelihood diversification strategies. Section three will briefly describe the methodological approach. Results will be presented in section four and will then be discussed in section five.

## **6.2 Vulnerability, livelihood and remittances**

Vulnerability can be defined as the susceptibility to suffer from damage if a natural hazard happens, in other words, the characteristics of a society making for a hazard to become a disaster (Cannon, 1994). Individuals and communities are vulnerable economically because they are poor, such as having little savings or access to bank credit. They are vulnerable geographically because they live in risky locations (e.g. as a result of limited land access or information on potential hazards), socially because they do not have a social security system, insurance or strong social networks, and politically, since their voice is overlooked by political institutions (Wisner and Luce, 1993). Vulnerability, capacity and livelihood are interconnected concepts since high levels of vulnerability or low capacities reflect poor entitlement to livelihoods (Gaillard and Cadag, 2009).

The concept of livelihood was developed to portray the complex way in which people make a living on a daily basis and to appraise the motives and consequences of adopting a particular livelihood strategy or pathway (Scoones, 1998). It refers to people's means and capacities to meet basic needs and sustain them durably, including in the face of stresses (e.g. seasonality, environmental degradation) and shocks (e.g. disasters related to natural hazards, economic crises) (Chambers and Conway, 1992). As Sen (1981) and later Watts and Bohle (1993) underscored, people's ability to sustain their livelihood depends on their entitlement to access and use adequate resources. These resources are generally regrouped in six main categories: natural, physical, human, social, financial and political (DFID, 1999). Entitlement or capability to use these resources depends on different opportunities and constraints that people are exposed to, and generally reflect the distribution of economic wealth within society, political power at play and social relationships (Start and Johnson, 2004).

In their everyday struggle, those with limited access to resources (e.g. adequate wages, land, social security system) generally diversify their livelihoods (Ellis, 2000). The diversity and strength of households' resources guide their ability to overcome disasters (Scoones, 1998). This may imply modifying and/or

mobilising the resources rooted in their existing structures and behaviours, such as limiting spending, looking for jobs, changing diet, using savings, claiming loans, and requesting government support (Ellis, 1998). In adopting such strategies, households try to achieve different short-term coping and long-term recovery goals. A livelihood strategy is successful when it has no negative impact on households' livelihood security and contributes to reduce their vulnerability (Adams et al., 1998). On the other hand, it is failing when "both short and long-term objectives are sacrificed in the struggle for survival" (Corbett, 1988: 265). Unsuccessful strategies may include skipping meals, stopping sending children to school, living only on subsistence farming, relying on external aid, begging, selling assets, and forced migration (Le Billon, 2000).

The ability to cope with and recover from disasters depends on people's vulnerability existing pre-event and their capacity to apply appropriate means of protection. Yet, communities are composed of members or groups with different access to resources and thus, with different levels of vulnerability and capacities to overcome disasters (Guijt and Shah, 1998). It is also the task of agencies involved in disaster management to support those who are the most vulnerable to such events. However, post disaster actions and recovery programmes are often unfairly dispensed towards the wealthier segments of society (Cuny, 1983; Middleton and O'Keefe, 1997). For these reasons, after a disaster some community groups may recover well or even become better off, while those unable to access adequate resources may be more vulnerable than they were before the event and ultimately may enter into a marginalisation process (Gaillard and Cadag, 2009).

Remittances are one of the livelihood diversification strategies used by people to both deal with everyday struggles and face natural hazards. This mechanism implies the migration of one or more household members. Those with weak entitlement to resources use their social networks to support a portfolio of livelihood resources. Thus, the migration-remittances nexus is generally guided by different 'push' and 'pull' factors, including lack of employment or irregular wage-labour income, an imperfect social security system, land shortage, absence



of private insurance, cultural norms and family obligations, and job opportunities abroad (Morton, 1998; Stahl and Appleyard, 2007). In addition, livelihood strategies may be intensified by deteriorating economic, environmental and political conditions, crises and disasters (Monsutti, 2008).

In Samoa, like in many Pacific Island Countries (PICs), remittances have become an important part of the country's economy and a significant source of income for most households. Globalisation processes, decline in agricultural productivity, opportunities for work overseas and migration schemes in host countries have resulted in the increase of the migration-remittances nexus (Connell, 2010). While in the 1960s less than 10% of the ethnically Samoan population was residing overseas, nowadays, there are more Samoans living abroad than in the country itself. Samoans have mainly migrated to New Zealand, Australia and the United States, permitting what has been named the *transnational corporation of kin* to develop (Bertram and Watters, 1986). In Samoa, remittances are generally used to deal with everyday needs and seem to represent a significant mechanism in time of disasters (Le Dé et al., 2015a). Diverse researchers have observed the unequal access to remittances in Samoan communities (Muliaina, 2003; Shankman, 1976). While this suggests differential capacities amongst households to overcome crises, few studies have focused on those with little or no access to remittances and how they perform in the face of disasters. This study is an attempt to fill this gap.

### **6.3 Methodology**

The study relies on three periods of fieldwork undertaken between 2012 and 2013 in the community of Tafitoala. A total of 21 interviews were carried out with disaster-affected households. Interviews were also done with officials from the government of Samoa (GOS) and from local and international Non Governmental Organisations (NGOs). Besides, a participatory approach was implemented, requiring the researcher to stay in the village and live in people's homes. Such an approach was indispensable to create strong links with the local

community and to better understand the social, cultural, religious and economic aspects that shape households' everyday life and remittance practices. Participatory techniques are increasingly utilised in community-based research. They aim at integrating local communities' perceptions, values, and main concerns (Chambers, 1994). In addition, participatory tools are progressively used to produce numbers and quantify other complex dimensions of livelihoods, such as power relations or social and cultural aspects in decision-making (Mayoux and Chambers, 2005). Participatory activities were then undertaken at community level with the households affected by cyclone Evan. Participatory methods involved the wheel of livelihood resources, carousel activities, and discussions about the relationship between poverty and remittances, the use of remittances, and the difficulties experienced during the cyclone. Participatory activities were then carried out more extensively with a group of households categorised as poor by key informants and by people themselves. This group was composed of participants representing eight households, being approximately 56 village members. The participatory tools used with the group of poor households included timeline, the wheel of livelihood resources, matrix scoring, proportional piling, and carousel activities, accompanied by focus group (FG) discussions on different issues related to poverty, remittances and disasters. The next section will present the findings of this research.

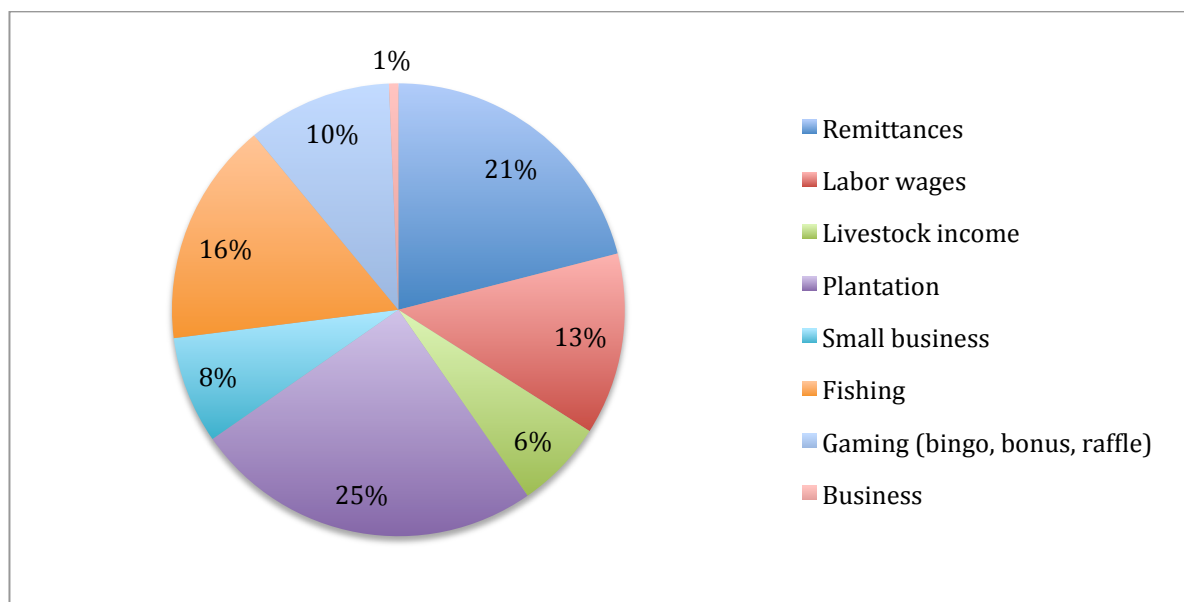
## **6.4 Remittances and the poor**

### *6.4.1 Assessing households' livelihood resources*

The study first aimed at understanding what the different tangible resources or sources of income composing households' livelihood portfolio are, and attempted to quantify the importance of remittances within that system. While livelihood diversification is not identical with income diversification, most studies assessing households' livelihood focus on the diverse type of incomes constituting their livelihood portfolio (Adams and He, 1995). Sources of income vary from urban to rural areas and may include wage labour, self-employment

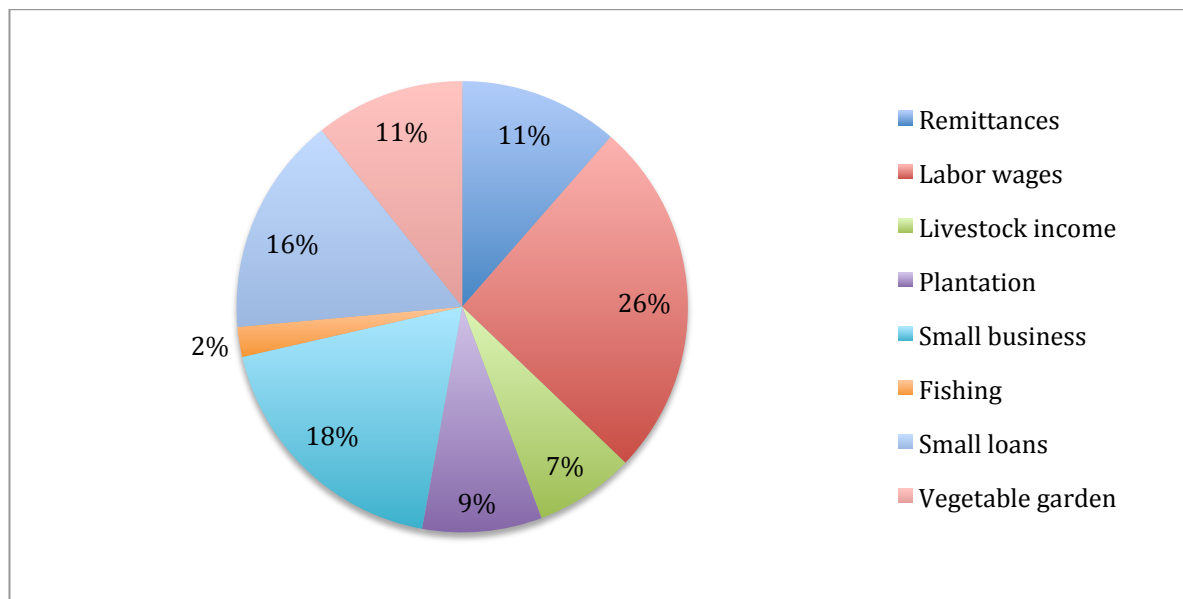
outside agriculture, crop income, livestock income, remittances, rentals, casual jobs, and informal activities (Barrett and Reardon, 2000; Tolossa, 2010). Information on households' incomes was generated by two distinct groups of households. The first one was mainly composed of middle class households (Figure 6.1), being a representative sample of the composition of Tafitoala village. The second group was constituted of the poorest households in the community (Figure 6.2). The participants of each group were asked to list the different sources of income that their household uses to make a living. They were then provided with 20 stones representing the total income of the household and allocated them in function of the significance of each resource (for more details see Le Dé et al., 2015b to come). Final results were then converted into percentages and are presented in Figures 6.1 and 6.2.

Figure 6.1: Livelihood resources used by the middle class households



Source: wheel of livelihood resources (n = 15 households)

Figure 6.2: Livelihood resources used by the poor households



Source: wheel of livelihood resources (n = 8 households)

Figure 6.1 shows that households' largest resource comes from the plantation (25%). Agricultural production mainly includes taro, banana, breadfruit, and coconut that are mostly used for households' own consumption and are sometimes sold at the market. Samoa is characterised by its customary owned land system, with about 81% of the country's land being held in customary tenure (Tcherkézoff, 1992). The land is the 'property' of the family (aiga) and is passed to the next generation, since it cannot be alienated. The family chief who owns the matai title has the responsibility of stewardship and must ensure that all the family members have adequate access for cultivation (Fana'afi, 1986). FG participants identified remittances (21%) as their second source of income. Remittances are received regularly, mostly on a monthly basis, and/or are requested for fa'alavelave that include weddings, funerals, title bestowals and other village occasions. People indicated receiving remittances to complement the lack of, and irregular, incomes from other resources, such as labour wages from casual and low-paid jobs or agricultural production. Moreover, all the elderly households interviewed were getting remittances from their sons and daughters, which confirms the findings of other studies in Samoa (Amosa and

Samson, 2012). In Samoa, people over 65 years old are entitled to receive a monthly pension of WST\$ 130 (about US\$ 56) as part of the Samoa National Provident Fund (SNPF). However, this pension is quite low and those under 65 years old are not entitled to access this social security system. Generally, elderly people largely rely on family support, with remittances constituting a kind of inter-generational social security system. Fishing represents 16% of households' incomes. However, wage labour only constitutes 13% of households' incomes. The participants explained that job opportunities are limited, and that labouring wages are often quite low. People identified bingo, 'bonus' and raffle as sources of income, which are grouped under the 'gaming' category. Gaming represents 10% of households' incomes. These activities are part of the village life and have a social and cultural function, being generally organised by churches, Women Committee, associations, and sometimes households for fund raising. Of course, participating in these activities requires buying grids (e.g. bingo), and betting some money (e.g. 'bonus' and raffle) that, as suggested in other studies (e.g. Brown and Ahlburg, 1999), often comes from remittances. Indeed, remittances may represent more than 21% of households' livelihood system. Households also indicated that small businesses and livestock respectively represent 8% and 6% of their livelihood portfolio. Finally, businesses only constituted 1% of households' livelihood system, and generally include shops, tourist accommodation and bus companies.

The same activity was undertaken with households categorised as poor in the village. Figure 6.2 demonstrates that labour wages constitute their largest source of income (26%). Such a result does not mean that poor households have greater access to employment. On the contrary, they generally only have one household member working and sustaining the household. FG participants pointed out that wages from labour were relatively small, being usually about WST 10 per day (about US\$ 4.25), and were related to low skilled jobs including cleaning, security, and irregular work in the village. Figure 6.2 also shows that small businesses (19%) are the second source of income for the poor. Small businesses generally imply self-employment and encompass activities such as sewing, selling food at school, and making handicrafts to be sold at the market. Small

loans were also perceived as an important resource to make a living, representing 16% of households' resources. FG participants asserted that they often have to request small loans to run their small businesses. Because of insufficient and irregular income, they cannot obtain loans from the banking system, but rather get credits from the local NGO Women in Business Development and other programmes from international organisations. Moreover, poor households indicated that remittances constitute about 11% of their total income. They argued that they had little to no access to remittances. For example, two of them explained that they stopped receiving remittances a few years ago. For those getting remittances, amounts were normally quite small. Furthermore, poor households receive remittances in a very irregular way, generally only two to three times a year, and these are usually sent for special occasions such as fa'alavelave, Christmas, and in the case of disasters and crises. Results highlight that the poor also rely on agriculture, with 11% of their total income coming from their vegetable garden and 8% from the plantation. The participants stated that they do not own plantation land and their extended family do not have enough plantation area for them. This means that they have to cultivate a vegetable garden, generally at the back of their house, which is mainly used for their own consumption. Figure 6.2 shows that livestock income is about 7% of poor households' livelihood resources. Fishing only represents 2% of their incomes, mostly involving the collection of shells on the reef.

Information provided in Figures 6.1 and 6.2 underscores the fact that households' livelihoods are highly diversified. However, the composition of livelihood income systems differs amongst the two groups. To make a living, the middle class households from Tafitoala mainly rely on their plantation and remittances, which represent almost half of their total resources. On the other hand, poor households have limited access to land and thus limited income from the plantation. The notion of landlessness in Samoa seems contradictory with the customary tenure system of the country. However, Muagututi'a claims that there is an augmentation of landless households and individuals in Samoa (Muagututi'a, 2006). Thornton et al. (2010) notice a similar pattern, arguing that this issue is quite new. Although the reasons for landlessness are often multi-

faceted, the authors explain that because Samoan families have expanded over the years there is nowadays less land available, and those without a title are likely to be the landless households. Such explanation fits with our research findings, as the sample of poor households were also those without a title. Furthermore, Figures 6.1 and 6.2 demonstrate that remittances are two times higher in the livelihood system of the middle class households than it is for the poor. While many households receive remittances on a regular basis, the poor only get remittances a few times a year. The amounts are generally quite small, with some of them reporting that they receive about WST 100 three to four times a year, while others get up to WST 400 to 500 twice a year. One reason is that the members of poor households have relatively low levels of education. Hence, they mainly have access to seasonal working visas that fall into the seasonal employment schemes in New Zealand and Australia. When they have family living abroad and remitting, their low educational level only permits them to get access to low level skilled jobs and thus low wages. Secondly, the poor often only have one family member living overseas, implying that a significant financial burden is placed on the remitter. These elements limit the ability of poor households to receive remittances in higher proportions and regularly during the year. In times of disaster, it may influence their capacity to claim remittances and use them as a mechanism to overcome the difficulties faced. This will be discussed next in the context of cyclone Evan.

#### *6.4.2 Cyclone Evan: impact and external response*

On 13 December 2012, cyclone Evan hit Upolu Island. Besides important material damage to village houses and infrastructure, the cyclone had a great impact on the agricultural production of many households. It is estimated that about 75% of Upolu's agricultural land was severely (45%) to moderately (30%) impacted. More than 80% of the banana production and 40% of the breadfruit trees were completely destroyed, thus leading to the risk of food insecurity issues for several communities (GOS, 2013).

Figure 6.3: Housing damages post-cyclone Evan



Source: photo taken by the researcher (January 2013)

This was the case in Tafitoala village, where many households had their houses seriously damaged (see Figure 6.3). The community also experienced major landslides, which according to interviewees led to the losses of 70% to 80% of their agricultural production (see Figure 6.4). During FG discussions, people stressed that the GOS and NGOs provided relief assistance immediately after the cyclone Evan. However, the participants argued that the longer-term recovery support was insufficient to deal with food security issues and to rebuild their houses. They explained that the GOS recommended to those affected that they should rely on their migration-remittance networks. An interview given by the prime minister of Samoa to Radio Australia confirmed this approach. When asked, “So, how bad will the food security problem get? What will people eat until a new crop can be harvested?”, the prime minister replied “Many of our people will resort to what we normally do, and that is to request assistance from relatives overseas” (Radio Australia, 2012).

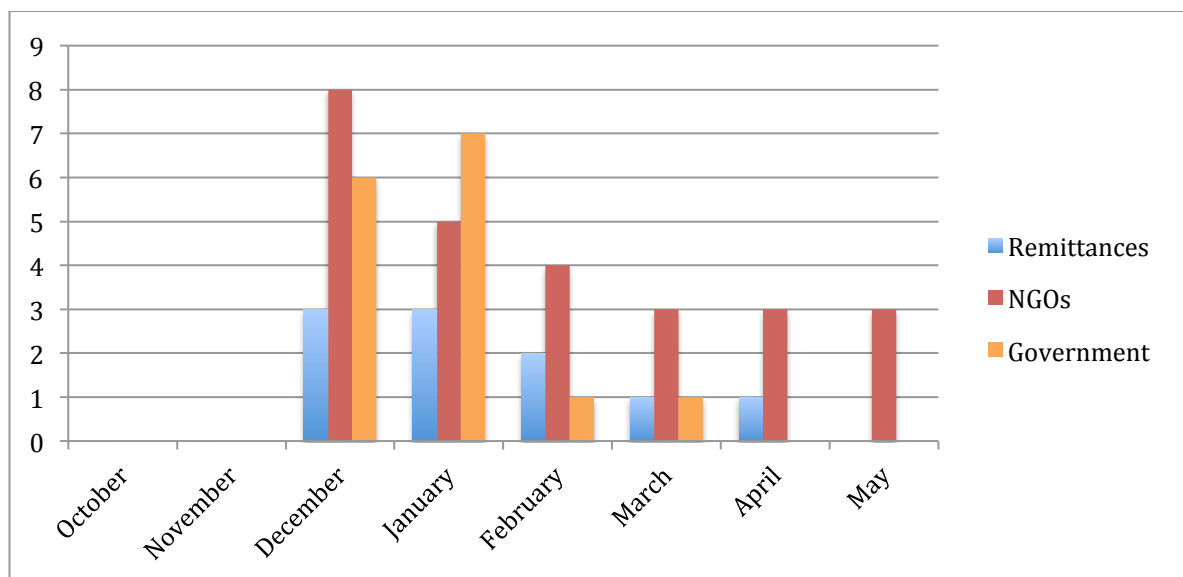


Figure 6.4: A community member of Tafitoala harvesting the leftover taro affected by landslides from cyclone Evan



Source: photo taken by the researcher (January 2013)

Figure 6.5: Reception of remittances, NGOs aid and government support for the 'poor' before, during and after cyclone Evan



Source: timeline and scoring technique.

Interviews undertaken with disaster affected households in Tafitoala revealed that remittances played a significant role in people's responses to the disaster. Most households that got remittances on a regular basis received more remittances after the cyclone. These served to counter-balance the loss of agricultural production and the lack of external aid. On the other hand, those with limited access to remittances and categorised as poor, seemed to experience greater difficulties in the face of the event. Thus, a participatory timeline mixed with a scoring technique from 0 to 10 (see Figure 6.5) was carried out with poor households to understand the significance of remittances, as well as government and NGOs support, before, during and after cyclone Evan.

Figure 6.5 shows that poor households received support from the GOS in December 2012, immediately after cyclone Evan. FG participants indicated that GOS aid increased slightly in January 2013, but diminished significantly in February and March, and was non-existent in April and May. Similarly, poor households received relief assistance from NGOs starting in December 2012. NGOs aid slowly decreased from December to March and then remained stable until May. Even though community members argued that external aid from NGOs and the GOS was very little, poor households estimated that these resources were much more significant than the remittances they received. FG participants indicated not receiving remittances in October and November. Remittances increased in December and were sent in January in similar proportions. Remittances then slowly decreased until April, but were not received in May. The participants explained that remittances are usually received for Christmas time, but rarely in January and February. Indeed, households declared that they could get support from their kin based overseas, in order to face the cyclone. Nonetheless, remittances levels were quite low. People solicited more support from their relatives both in quantity and through time, but argued that migrants could not afford sending more remittances. Indeed, FG participants asserted that the mechanism of remittances was insufficient to deal with the event and affirmed struggling more than the other villagers who received regular and greater remittances.

In addition, people explained that their lack of access to remittances had indirect effects on their ability to access other resources. Although the GOS declared that no cash would be allocated to households who lost their house, a Credit Line Facility was initiated by the government to allow those who do not have regular income and not enough assets to guarantee the repayment, to obtain a loan to rebuild their house (CBS, personal communication,). Hence, in March 2013, the Central Bank of Samoa (CBS) made available WST 26 million to the Development Bank of Samoa (DBS) and Samoa Housing Corporation (SHC). While the DBS only sustains the business sector, the SHC could provide loans for housing to disaster-affected households with an interest rate of 3% for a 12-month period, rather than the average 10% usually charged by commercial banks (CBS, 2013). Access to this credit scheme was provided if a disaster-affected household had a family member overseas “who can possibly help out paying the loan, or who serves as a guarantee to pay the loan” (CBS, personal communication). While targeting those with limited income, only one of the eight FG participants could get a housing credit from the SHC, because the husband had a regular salary. However, the seven other households stated not being able to obtain a housing credit from the SHC. Since their family overseas had limited financial capacities and could not afford sending remittances on a regular basis, they could not be credit guarantors and thus fit into the Credit Line Facility scheme. Indeed, the limited migration-remittances mechanism not only made it more difficult for the poor to deal with the event; it also had indirect effects on their access to other resources, and ultimately affected their ability to recover. In turn, those households within the community who had regular access to remittances could more easily fit within the Credit Line Facility scheme and thus recover faster from the event. Moreover, some of the interviewees and FG participants explained that they did not even have to request a credit, since their greater access to remittances, together with other of their resources, were enough to rebuild.

#### *6.4.3 Utilisation of remittances*

Limited access to remittances may influence the way households use this resource both before and after a disaster. For example, Yang (2003) finds that

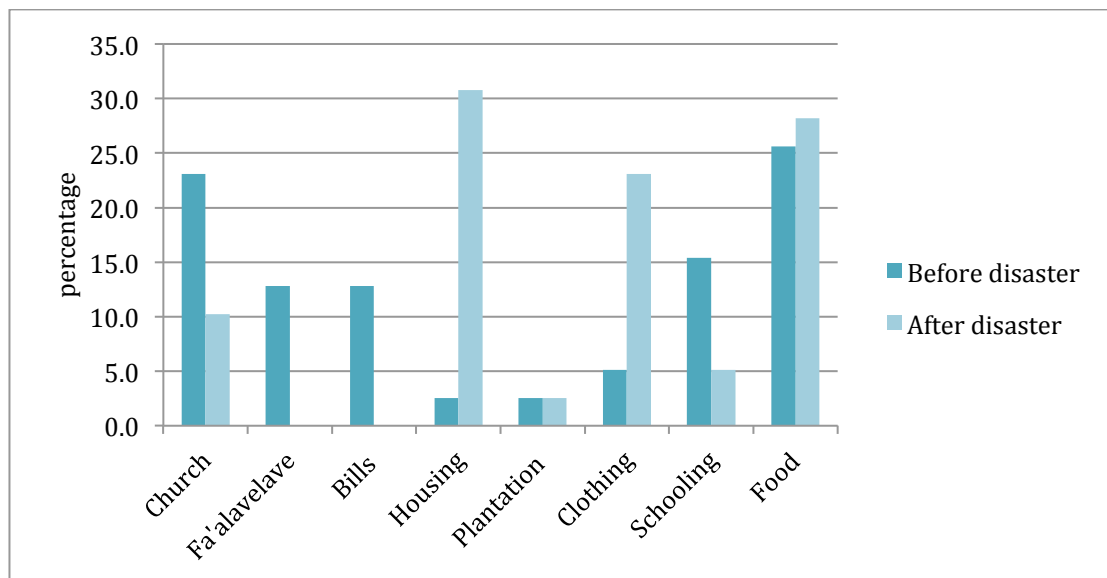
those below a certain income threshold mainly use remittances for subsistence consumption, a pattern that is amplified in time of crises. Using proportional piling methods, poor households indicated how they utilised remittances both before and after cyclone Evan. The information obtained was then converted into percentages and is presented in Figure 6.6.

In pre-disaster or 'normal' time, poor households mainly use remittances to meet their everyday needs. Their primary spending is to buy food (25.6%), representing about a quarter of remittances utilisation. Remittances are also allocated to schooling (15.4%), bills (12.8%), and clothing (5.1%). Besides, a significant proportion of remittances are used for religious and cultural events. At 23.1%, church donations are the second largest use of remittances. In Samoa, church is very important, as about 99% of the population are Christian (Lilomaiva-Niko, 1993). In the 1970s, Shankman (1976) was already noting that the expenses of a family for church were from 10% to 25% of all cash expenditure. Fa'alavelave, central to Samoan culture and closely linked to church, also consume a significant proportion of remittances (12.8%). Finally, the poor use remittances in a very limited way for purchasing clothes (5.1%), building or upgrading housing (2.6%) and buying tools and chemicals for their plantation (2.6%).

Proportional piling was done with the same participants to investigate how remittances were reallocated after cyclone Evan. Results show that most remittances were spent to repair or rebuild the house (30.8%), get food (28.2%) and buy clothes (23.1%). FG participants explained that they received very limited remittances, and thus, only used them to deal with basic needs. Because they could not access loans for housing, people used most of the remittances to fix their houses. In the longer-term, remittances were also allocated to balance the lack of food resources. After the disaster, some remittances were still directed to church (10.3%). One of the participants affirmed: "even though we have limited remittances and live in bad housing, we still have to contribute to our church commitment, because it is our culture and our faith". After cyclone Evan, people considerably limited their remittances spending on schooling

(5.1%) and plantation equipment (2.6%), and no remittances were directed to fa'alavelave or bills.

Figure 6.6: Poor households' utilisation of remittances, before and after cyclone Evan



Source: proportional piling technique.

Overall, results indicate that during pre-disaster time poor households utilise remittances for subsistence. According to the participants, this contrasts with middle to upper level income households who tend to direct remittances for investment to productive assets and generally utilise them more sustainably. For example, they allocate more remittances to agricultural equipment, housing construction, and small businesses than the poor do, thus making them less vulnerable economically. For the poor, church and fa'alavelave represent a considerable percentage of the total remittances spent. FG participants claimed that church donations and fa'alavelave are often hard to sustain economically, but also indicated that it is part of Samoan culture and social organisation. A study from Fitzgerald and Howard (1990) concluded that 91.6% of Samoans support local churches, and more recently a report from AusAID estimated this to be about 97% (Shuaib, 2008). The notion of tautua (service to families and

the community) is central to the contribution to church and fa'alavelave (Lilomaiava-Niko, 1993). At the same time, giving to the church and contributing to fa'alavelave certainly provides political power within the village. As noted by Shankman (1976), giving too little would result in a loss of prestige and social status in the community.

After cyclone Evan, remittances were mainly used to cover the most basic needs, including having a shelter, food and clothing. Poor households re-allocated remittances that would normally be directed to schooling, everyday bills, fa'alavelave, and reduced the spending on church and related activities. This demonstrates the flexibility of this mechanism, thus permitting households to adjust remittances utilisation in relation to their requirements. However, rather than a consciously planned strategy, this management of remittances was largely 'forced', as poor households re-allocated remittances for survival imperatives. For example, people acknowledged struggling to get food and a shelter, and sent their children to school less often, as they could not afford paying for their lunch and bus fares. They also spent remittances on housing as they needed a shelter and had no alternative source of income, or access to housing credit. Indeed, the limited availability of remittances (and other of their resources) obliged them to reduce some of their remittances spending for survival. It also implied a diversification of their livelihood resources and activities in order to overcome the difficulties faced in the crises, which will be discussed in the following section.

#### *6.4.4 Livelihood resources and strategies used to deal with cyclone Evan*

While different studies show that remittances may allow people to get access to health care treatment (Suleri and Savage, 2006), rebuild their house quickly (Deshingkar and Aheeyar, 2006), and recover better overall (Wu, 2006), the lack of access to this mechanism suggests the need to use other resources. Indeed, the research aimed at quantifying the importance of remittances in people's diversification strategies to attain different coping and recovery objectives. Furthermore, an attempt was made to understand the implications that the lack

of access to such a mechanism had on livelihood pathways. The participants listed the resources that they used to face the disaster, which were reported horizontally in a matrix (see Table 6.1). They also identified different coping and recovery objectives during cyclone Evan that were placed vertically in the matrix. Poor households were then provided with 30 stones and distributed them on each resource according to their importance in trying to achieve each objective.

Table 6.1 demonstrates that remittances were not very important to cope with the disaster. It also emphasises the lack of government support to attain different short-term objectives. FG participants indicated that they rather used the resources that are rooted in their everyday life. These include labour wages, agricultural production, and small businesses, as well as the intensification of some activities such as fishing. However, because of the fragility of these resources and limited capacity to obtain higher remittances and external support, households had to modify their livelihoods. Eventually, people acknowledged being forced to sell the production of their vegetable garden and plantation that had not been affected by the cyclone. At the same time, all the FG participants explained reducing their food intake for each meal and often only having dinner. In the longer-term, such livelihood strategies proved to be unsustainable, especially since people had used all their food reserves and spent their savings.

Table 6.1: Resources utilised by ‘poor’ households during and after cyclone Evan to attain livelihood objectives

Livelihood objectives and indicators	Jobs	Agriculture	Remittances	Fishing	Small business	Government support	NGOs aid	Savings	Credit
Timely available	6	6	1	6	5	0	0	3	3
Provide us with access to health care	4	3	0	0	5	7	7	0	4
Help us coping with disaster	7	4	2	4	4	0	6	1	2
Help us avoiding modifying our livelihood	7	10	0	7	6	0	0	0	0
Help us to fast and good recovery	7	1	4	0	3	2	6	0	7
Help us invigorating our livelihood	6	1	5	5	0	3	5	0	5
Overall preference	7	10	0	7	6	0	0	0	0

Source: participatory matrix scoring.

In order to achieve recovery objectives and revitalise their livelihood, FG participants indicated the greater role of remittances, such as repairing their house. Nonetheless, this resource appeared to be insufficient to absorb the shock and successfully cope with the event. Indeed, households searched for new sources of income; some of them looked for work in Apia, while others were doing some casual jobs such as working as fishermen on boats and doing masonry. However, such strategies were not very successful and people indicated having to rely on NGOs aid and/or requesting credit from shops, richer neighbours and the extended family in order to meet their everyday needs.

Amongst the group of participants, those struggling the most were the elderly without access to remittances. One household with elderly members had lost contact with their daughter five years earlier, and had received no remittances



since then. Five months after the cyclone, this family was still living under a tarpaulin as shelter and was getting support from neighbours for everyday needs. Another household was headed by a 55 years old woman who had no close family member overseas. She lost her house in the cyclone. Since the event she was provided with a shelter by one of the households in the village and was doing some gardening as well as other informal activities to generate some income. She was under 65 years old and could not access the retirement pension from the SNPF. Without remittances and any form of support from their children, both elderly households were largely unsuccessful in dealing with the cyclone. Their inability to rebuild their houses added to their dependence on neighbours and made them more vulnerable than they were before the event. Thus, while the absence of remittances certainly plays a central role in affecting vulnerability of the elderly during 'normal time', our findings suggest that in the case of disaster, this resource may become crucial for this fringe of the population.

### **6.5 Poverty and lack of remittances access: reinforcement of pre-disaster vulnerability**

Remittances are part of a portfolio of livelihood resources that households utilise to make a living. They help balancing the lack of access to other resources, including the limitations of the social security system, small labour wages, limited job opportunities and the absence of insurance (Schrieder and Knerr, 2000; Yang and Choi, 2007). Communities are not homogenous entities, but are rather composed of members with different priorities, interests, rights and overall unequal access to resources (Guijt and Shah, 1998). In Tafitoala, remittances are only one-half as important in the livelihood system of the poor, than they are for other households in the community. It was found that poor households get little to no remittances, and that they receive remittances irregularly. Indeed, results seem to indicate a correlation between poverty and the lack of access to remittances. In the 1970s, when studying the emergent effect of remittances on the village of Sa'asi, Shankman (1976) already noticed great wealth disparities between those with remittances and those with limited

or no access to this resource. More recently, a report from AusAID stated: “in rural areas access to remittances is increasingly the distinguishing factor between households facing hardship and those that prosper” (Amosa and Samson, 2012: 27). We found that poor households have limited access to remittances because they have fewer migrants based overseas and potentially remitting. In addition, they usually have a low level of education, only giving them access to seasonal jobs and/or low skilled employment in the host country. This often means that they have small wages and thus limited capacities to send remittances both regularly and in higher proportions. Hence, those with low access to remittances appeared to be more vulnerable socially, since their transnational networks are weaker than the rest of the community. They are more vulnerable economically, since they cannot use remittances for savings, higher-level education or investments in productive assets, but rather allocate them to basic needs and socio-cultural obligation. Their houses are also more vulnerable because limited remittances do not allow affording strong building materials.

Limited access to remittances not only affects poor people’s capacities to deal with everyday struggle; results point out that such vulnerable positions are reinforced, or at least reproduced, in time of disaster. Eventually, the households receiving little or no remittances became even more disadvantaged after cyclone Evan. Deshingkar and Aheeyar came to the same conclusion following the 2004 tsunami in Sri Lanka, qualifying it as a “remittances gap” (Deshingkar and Aheeyar, 2006: 18). Of course, the notions of vulnerability and capacity cannot be reduced to the sole remittances mechanism. Among the group of poor households from Tafitoala, those struggling the most not only had limited to no remittances access, but also weak natural, human and financial resources. They were the elderly, irregular wagers, women-headed households, landless, and often households with a combination of these characteristics. Undoubtedly, the inability to claim and use this mechanism in the face of the disaster made a great difference between those successfully coping and recovering, and those who failed to adapt.

Remittances may enable households to better cope with food security issues and meet other essential needs crucial in time of hardship (Suleri and Savage, 2006). After cyclone Evan, most middle and upper-level income households received higher and regular remittances, and thus could compensate the loss of agricultural production and limited external aid. Besides, remittances may have more indirect effects on households' capacity to face crises, such as providing them with access to other resources. This study shows that those with a strong migration-remittances network could fit in the Credit Line Facility scheme and more easily obtain a housing loan from the SHC. Likewise, contributing through remittances to church donation and fa'alavelave may provide the household with a better social and political position within the community (Muliaina et al., 2007; Shankman, 1976). In turn, failing to meet expectations towards church and fa'alavelave could be punished by the village councils in ways that are "often harsh and financially expensive" (Muagututi'a, 2006: 62). Thornton et al. (2010) explain that those facing hard times and unable to meet their church and cultural duties may opt out of traditional structures. However, community members may become stigmatised, and "such declining involvement in village affairs might ultimately result in a denial of customary land rights" (Thornton et al., 2010: 13). Thus, the absence of, or lack of access to, remittances may exacerbate vulnerability existing pre-disaster in different ways (e.g. political, natural and social vulnerability). Hence, remittances are part of a complex livelihood system made of tangible and intangible resources. They interact with and influence other resources in ways that overall livelihoods may be weakened or strengthened (e.g. obtaining a housing credit, maintaining political power, losing social position in society). Therefore, remittances are more than just a self-insurance, as they have indirect and less quantifiable effects on the longer term reduction of vulnerability of affected households in the sense given by Adams et al.: the "reinforcement of assets, incomes and social position to maximise future claims on resources" (Adams et al., 1998: 265). For poor households, having limited possibilities to access and use remittances when disasters occur may mean entering into an undesirable and unsustainable livelihood pathway, leading to impoverishment, persisting food insecurity, and increasing vulnerability.

Results also suggest that people's decision making in facing disasters is complex and depends on a large array of factors that go beyond the sole threat of the hazard. Poor households did not only use remittances to cover the losses of cyclone Evan, but also kept contributing to church even though they were struggling with the event. The motivation for such a choice is multi-faceted and may vary among households. Church brings well-being to community members and allows local tradition to be perpetuated (Thornton et al., 2010). On the other hand, it may be the result of social pressures linked to Samoan society and what Etzioni terms as the "culturally oppressive" character of communities (Etzioni, 1996: 308). Different studies done in disaster contexts have shown how the choices that individuals and communities make are related to their perceptions, priorities and other structural constraints (e.g. Gaillard, 2008; Texier, 2008; Wisner et al., 2004). Indeed, understanding people's choices in the face of disaster, including those related to remittances, requires taking into account other cultural, historical, political, and socio-economic elements independent of the hazard (Cannon, 1994).

## **6.6 Conclusion**

In the last few years, a growing number of studies have focused on remittances in the context of disaster. Remittances have often been considered as a form of self-insurance, mainly because of their counter-cyclical characteristics, the proportion in which they are sent following crises, and their speed in reaching those affected (Deshingkar and Aheeyar, 2006; Yang and Choi, 2007). Although such a mechanism allows people to better cope with and recover from disasters, this article has highlighted that remittances tend to be accessible by households with middle to upper level incomes, rather than by the poorest. Findings suggest that in Samoa, there is a link between poverty and lack of access to remittances. Moreover, results indicated that poor households with limited or no access to remittances became more vulnerable after the disaster. They were those struggling the most in meeting both immediate needs and longer-term recovery objectives, which had significant implications in terms of sustainability of their

livelihoods.

This study suggests that a better understanding of who has and has no access to remittances would help improving the assistance delivered in the case of such events. In addition, results indicate that more effort should be made to achieve a better targeting of post-disaster assistance towards the poorest. The Credit Line Facility could hardly be accessed by the poorest who had no opportunity to voice their opinion on this loan scheme. In the longer-term, it is likely that the Credit Line Facility will increase the inequalities existing between those with and without strong migration-remittances networks. Indeed, this emphasises the need for post-disaster mechanisms that reach the most vulnerable, which certainly requires their participation in the decision-making and planning of such programmes (Gaillard and Cadag, 2009). Moreover, findings indicate that remittances are a kind of traditional social protection system, which confirms the findings of other studies in Samoa (Amosa and Samson, 2012) and other low-income countries (Schrieder and Knerr, 2000; Wu, 2006). The elderly and woman-headed households without access to remittances were those struggling the most in the aftermath of the cyclone. Hence, policy should be geared towards improving social protection system, such as in better targeting this fringe of the population.

This study also emphasised that assistance is required for longer-term recovery. A major consequence of crises and livelihood insecurity is the drastic reduction of livelihood options (Macrae et al., 1997). Supporting people in their existing livelihoods may be insufficient or even inefficient, especially when these are unsustainable (as assessed by local people themselves) (Schafer, 2002). According to Chambers, the poorest should be provided with “baskets of choices” to get more diverse and risk-averse livelihoods (Chambers, 1989: 20). In Samoa, the government has successfully carried out projects in partnership with the Asian Development Bank to develop small businesses and micro credit that targeted the poorest (Amosa and Samson, 2012). In the same vein, the local NGO Women in Business Development in partnership with Oxfam has developed different projects that offer livelihood options to the poorest. Indeed, more

initiatives of this type may be developed following disasters. Furthermore, poor households may be given priority for migration options policy in the aftermath of disasters aimed at supporting those affected. In addition, since members of poor households often have low educational levels and limited financial capacities to be able to migrate and remit, governments and development agencies may endow them with the skills and other support required to fit in particular migration schemes and/or facilitate their access to labour markets overseas.

Samoa shares many similarities with the other PICs, including high vulnerability to natural hazards, the role of remittances as an informal social protection system, existing migration policies, as well as the importance of remittances as a mechanism to face disasters (Le Dé et al., 2013; Muliaina, 2003). While our findings are likely to be quite relevant to this geographical area, there is surely a need for further research on these issues, with policy implications that need to be adapted to specific areas. Furthermore, diverse studies in other low-income countries increasingly indicate the importance of remittances as a crucial resource to overcome disasters (Mohapatra et al., 2009; Suleri and Savage, 2006). However, little is known on the degree of access to this resource by different groups, and the implications of this in people's livelihood options and ability to cope with disasters. A livelihood approach, implying the involvement of those directly concerned, may increase our comprehension of such issues, improve the design of policies aiming at supporting those most at risk, and ultimately would reinforce their abilities to face natural hazards.

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## Chapter 7 Our family comes first: migrants' perspectives on remittances in disaster

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### Abstract

A growing number of studies recognise the importance of remittances in time of disaster. Yet, very little research focuses on migrants' perspectives. The paper explores the role of Samoan households living in New Zealand who supported their community of origin during and after the 2009 tsunami. It investigates the main determinants guiding remitters' behaviour and examines the impacts that remitting had on them. The article challenges New Economics of Labour Migration's co-insurance hypothesis, the dominant conceptual understanding of remittances behaviour. It is found that migrants remitted because of (1) a sense of obligation/responsibility to assist their family, (2) a consciousness of the economic struggles experienced in Samoa and (3) religious ethics. Furthermore, while remitting in the disaster context could imply severe economic impacts on migrants, it also reinforced the social ties they had with the affected community, contributed to their well-being and may have increased the community's resilience to face natural hazards.

Keywords: remittances – migrants – disaster – participatory methods – transnational community

## 7.1 Introduction

Over the last 15 years, there has been a rise in research interest on the impact of remittances on poverty (Adams and Page, 2005), inequalities (Brown and Jimenez, 2008) and their capacity to facilitate economic development (De Haas, 2005; Gupta et al., 2009). Different studies have also pointed out the importance of remittances in time of disaster. During crises, remittances levels increase rapidly and in important quantities, and seem to have meaningful effects on both the short-term coping and longer-term recovery of disaster-impacted communities (Le Dé et al. 2013).

While remittances are beneficial to many households, little is known about the motives of migrants to remit in a disaster context. The migration-remittances nexus is predominantly understood from the viewpoint of the country of origin, with very little attention paid to the migrants' perspectives (Lindley, 2008). Most of the studies investigating migrants' remitting behaviour are based on New Economics of Labour Migration (NELM) theories (e.g. Brown and Poirine, 2005; Cai, 2003; Fransen and Mazzucato, 2014; Marcelli and Lowell, 2005). In this conceptual approach, migrants are connected to their family in the home country via an inter-temporal and mutually beneficial agreement (e.g. co-insurance, loan repayment, maximisation of benefits), which is based on notions of risks and investments (Taylor, 1999). However, the applicability of NELM theories post-disaster remains unclear (Arango, 2000; Fransen and Mazzucato, 2014). Moreover, some researchers have pointed out that it is a very economic lens within which NELM theorises remittances, and highlight the lack of consideration for the societal context, social relations and emotions as influence of remitting practices (De Haas, 2007; Lianos, 1997). Furthermore, while the literature has largely focused on the impacts that remittances have on the receiving areas, the impacts that they have on the senders have been overlooked and under-researched (Lindley, 2009; Meyers, 2002). Addressing these issues appears to be relevant both conceptually and at the policy level.

This paper aims to investigate remittances in a disaster context, from the

perspective of migrants. In particular, it focuses on three main objectives: (a) to explore the dynamics of remittances in a disaster context; (b) to investigate the impacts that the act of remitting during disaster has on migrants; and (c) to understand the main elements that guide migrants' remitting behaviour. This study draws on qualitative and quantitative data collected with Samoan migrants living in New Zealand. The Samoan community is the largest Pacific ethnic group (48.7%) living in New Zealand (Statistics New Zealand, 2013). Moreover, Samoa is well known for its high remittances levels, which can be particularly elevated in disaster time (Le Dé et al., 2015a; Muliaina, 2003). This research focuses on the tsunami that hit Samoa on the 29 of September 2009 and affected more than 5000 people (GOS, 2010). The next section briefly reviews the main theories on migration and remittances, including NELM. Section three provides some background on Samoa and the existing studies done on migrants and remittances. Section four describes the methodological approach used. Sections five and six present the research findings, which are then discussed in section seven.

## **7.2 Main theories on migration and remittances**

The first and certainly most influential theory on migration came from neoclassical economics and conceptualised migration as resulting from the geographical distribution of capital and labour (Todaro, 1976). Migration was understood as an individual decision that people make to increase their condition of life. It was therefore based on utility maximisation, calculated choices and projected net returns. Developed in the 1980s, NELM theories arose as criticism within the neoclassical approach and can be seen as an enriched version of this approach to migration (Arango, 2000). NELM differs from earlier neoclassical models in that migration is not only motivated by maximisation of profits but also by risk spreading (Taylor, 1999). This theory also gives more importance to the household as the unit within which the decision-making takes place (rather than by individuals). In addition, while remittances were absent from neoclassical economic theories, they play a central role within NELM

perspectives (De Haas, 2007).

NELM sees migration and remittances as a strategy of income diversification that households adopt in order to minimise the risks and/or overcome constraints linked to credit, insurance and markets that generally exist in low-income countries (Taylor, 1999). Indeed, the migration-remittances nexus is seen as an inter-temporal and mutually beneficial agreement between migrant and home (Stark and Bloom, 1985). The family invests in a household member as a future migrant, which includes paying the expenses related to education, travel and supporting the migrant in time of unemployment (Brown and Poirine, 2005). Hence, remittances are a kind of return on investment where migrants pay back the 'loan' to the household, which in return can receive a regular source of income (Stark and Lucas, 1988). Furthermore, this strategy aims at providing the household with a form of insurance for risks, the rationale being that migrants will send remittances to the family in time of adversity, including bad harvest, seasonality and disasters (Stark and Lucas, 1988). To be operating, this 'co-insurance contract' needs to be self-enforcing, thus requiring a mix of altruism and self-interest (Rapoport and Docquier, 2006). Altruism is based on the assumption that migrants in the destination country care about the welfare of the family members living in the country of origin. For NELM theorists, this also implies that remittances may decrease over time because the links existing between the country of origin and the migrants may weaken (Lucas and Stark, 1985; Poirine, 2006). Moreover, the contractual arrangement requires some form of self-interest from migrants. It is largely based on the idea that migrants intend to come back to their country of origin. Self-interest relates to the benefits from the contract, especially increasing the wealth of migrants. Moreover, migrants remit to accumulate assets and invest in the country of origin, to increase prestige or political influence when returning back home, and to secure their inheritance (Brown, 1997b; Rapoport and Docquier, 2006).

Although in focusing on households' income diversification rather than individual income maximisation, NELM theories differ from neoclassical models; they still conceptualise migration and the anticipated remittances as a calculated

strategy, resulting from rational and planned choices (Arango, 2000). This approach has been criticised for not taking into account some of the different structural constraints and unpredictable events experienced by people when migrating and sending remittances (De Haas, 2007). For example, Lindley (2009) showed that the first intention of Somali refugees living in London and remitting back home was primarily to deal with security issues rather than for profit maximisation or investment. Some researchers have also criticised NELM theories for defining migrants as satellites of the original households (Lindley, 2008). Others critiqued NELM for reducing migrants to a purely economic role of remitter and neglecting the emotional, cultural and social significance for both migrants and receivers (James, 1997; Marsters et al., 2006).

Livelihoods and transnationalism approaches contribute different views on migration and remittances. A livelihood conceptual framework aims to account for the social realities experienced by local people, their capacities, as well as the different structural constraints that they are exposed to (Scoones, 1998). Mainly used by geographers, sociologists and anthropologists as a framework to investigate households' livelihood strategies, the focus is on the notion of entitlement to access and use of resources (Chambers and Conway, 1992). Thus, migration and remittances are seen as livelihood diversification strategies at household level to insure against potential shocks and stresses, and generate income in order to deal with local economic constraints (Scoones, 2009). Livelihood approaches diverge from NELM in that they do not perceive households as passive victims of globalisation processes and capitalist forces, but recognise people's agency and their active role in improving their livelihood through different strategies. However, as De Haas (2010) noted, while livelihood approaches offer a more pluralist rather than structuralist approach as in NELM, they both share similarities, such as their conceptualisation of remittances from the perspectives of the household of origin.

Transnationalism perspectives challenge the dichotomy 'origin' and 'destination' as well as categories such as 'temporary', 'permanent' and 'return migration', since a migrant's life and behaviour is increasingly shaped by circulation and



simultaneous commitments to multiple societies (De Haas, 2007). Many migrant communities conserve strong linkages at the transnational level, exchanging resources and information together with participation in social, cultural and political activities (Vertovec, 2001). Technical improvements of transport, Internet, phone and television facilitate the development of transnational ties and identity, thus questioning the hypothesis that migrants necessarily intend to come back home or even lose ties with the members of the family (Guarnizo et al., 2003).

These different conceptual approaches have been applied to explore migration and remittances features in Samoa and more broadly in Pacific Island Countries (PICs). The following section reviews the existing studies done on Samoan migrants.

### **7.3 Samoan migrants and remittances: a review of the existing data**

Samoa is a nation located in the South Pacific region and is categorised as a Small Island Developing State. Over the last 50 years, Samoan transnational migration has increased considerably. Today, there are more Samoan-born Samoans living abroad than in the country itself, mainly in New Zealand, Australia, the United States (US) and American Samoa. In 2013, remittances levels reached about 22% of the country's GDP, being the seventh country in the world in terms of remittances as share of national income (World Bank, 2014). For these reasons, there has been a lot of interest in migration and remittances in Samoa and more generally PICs. Two general approaches can be identified within the existing literature: one being economic and the other providing more social perspectives on migration and remittances, the former approach being the most common.

In the mid-1980s, a number of economists interpreted this migration-remittances process as a way for the Polynesian populations, including Samoa, to get maximum returns on overseas social capital investments (Bertram and

Watters, 1986). Labelled as MIRAB (Migration, Remittances Aid and Bureaucracy), this model had similarities to NELM theories. Remittances were considered 'comparative advantage' and 'invisible exports' to wealthier countries and the action of remitting the result of economic rational behaviour based on investment in the home country and wealth increase (Poirine, 1998, 2006). Indeed, a large body of research trying to understand the remitting behaviour of Samoan migrants used both MIRAB and NELM theoretical frameworks. For example, in a study on Samoan and Tongan migrants living in Australia, Brown concluded that "migrants are motivated to remit for reasons of self-interest, and in particular for asset accumulation and investment in their countries of origin" (Brown, 1997b: 623). This finding is shared by Brown and Ahlburg (1999), who also concluded that "both senders and recipients of remittances behave in an economically rational manner" (Brown and Ahlburg, 1999: 133). In another study, Brown (1997a: 135) stated that Samoan migrants remit because of financial obligation, or in order to repay debt to the relatives who provided assistance for migration. The author further suggested that Samoan migrants remit for reasons of self-interest.

Earlier work from Shankman (1976: 56) offered a more tempered view, arguing that Samoans were migrating to fulfil their obligations with the family (*aiga*) "without the immediate pressures and uncertainties of village life", and that in turn the family was encouraging migration to get some benefits, mainly remittances. In his work on Samoan migrants, Macpherson (1994) shared a similar position, indicating the importance of obligations towards the family as a main reason for migrants to remit, rather than individualistic motives suggested by economists. More generally, insiders (Hau'ofa, 1993; Tamasese et al., 2010) and outsiders (James, 1991; Marsters et al., 2006) criticised economic approaches for dissociating the economic actions from the social relationships and cultural norms within which remittances take place.

A number of studies have identified that when disasters happen, Samoan migrants may send high levels of remittances. For example, in the aftermath of cyclone ofa in 1990 and cyclone Val in 1991, Samoan households from Fusi

village declared that they received more remittances than in any cyclone-free year (Muliaina, 2003). More recently, a study on five coastal villages indicated that remittances were one of the main resources used by tsunami-affected households to deal with the event (Le Dé et al., 2015a). However, there is very limited empirical research done on remittances in a disaster context from the perspectives of the migrants. This research is an attempt to fill this gap.

#### **7.4 Methodology**

While the majority of empirical research on remittances are mainly economic in their methodological approaches, this research is aimed at collecting both quantitative information on migrants' remittances as well as integrating migrants' views, feelings and impacts that remitting had on them during and after the 2009 tsunami. It therefore draws on semi-structured interviews and participatory methods. Fieldwork took place between 2013 and 2014 with migrants who had relatives affected by the tsunami. One difficulty was to identify those migrants. We used a snowballing technique through different networks (e.g. community leaders and church pastors) to contact potential participants.

A total of 12 semi-structured interviews were done with migrants who had family affected by the tsunami. Of these, seven interviews were done in Auckland where 66.5% (95,916 people) of Samoan migrants in New Zealand live (Statistics New Zealand, 2013), three interviews were in Napier and Hastings located in the Hawke's Bay region, and two were in Samoa with migrants visiting their relatives. Interviewees were of different ages, and all had been living in New Zealand for more than 10 years. Seven of the interviewees are women and five are men.

Participatory activities were done in Auckland with eight participants, and in Porirua, a town located close to Wellington, with a group of five participants. Each participant represented his or her household. All thirteen participants were living in New Zealand for more than 15 years and their ages ranged from 35 to

65 years old. The composition of participants was gender-balanced. Participatory tools included timeline with proportional piling technique, impact diagram and Venn diagram. Each participatory activity was followed by a focus group (FG) discussion. The next sections provide more details on these participatory tools together with the findings of this study.

## **7.5 Disasters and the dynamics of remittances**

### *7.5.1 Pre-tsunami remittances*

We first aimed to quantify the significance of remittances as a share of migrants' income both before and after the tsunami, and understand the general patterns of remittances. A participatory timeline and proportional piling method was carried out. The participants were provided with 20 beans that represented the total income of the households and indicated the importance of remittances for each month. Using colour-coding, a distinction was made between remittances in the form of money sent through formal channels (e.g. money transfer agents, banking system) entitled 'formal remittances', and in-kind remittances together with the money sent via more informal channels (e.g. hand-carried cash, goods sent through organisations), labelled as 'informal remittances'. Rather than individual migrants, the household was used as unit of analysis since the participants indicated that remittances (particularly in disaster time) had implications for the broader household.

Figure 7.1 shows that, in the year preceding the tsunami, remittances were sent quite regularly, but the amounts varied noticeably, from 13.33% to 38.33% of migrants' households' income. All the FG participants indicated sending remittances to their close relatives, generally parents as well as sisters and brothers, which confirms the findings from existing studies (Le Dé et al. 2015b; Muliaina, 2003). The highest remittances were sent in October (31.67% of households' income) and December (38.33%), the former being for White Sunday and the latter for Christmas. These religious events are generally the

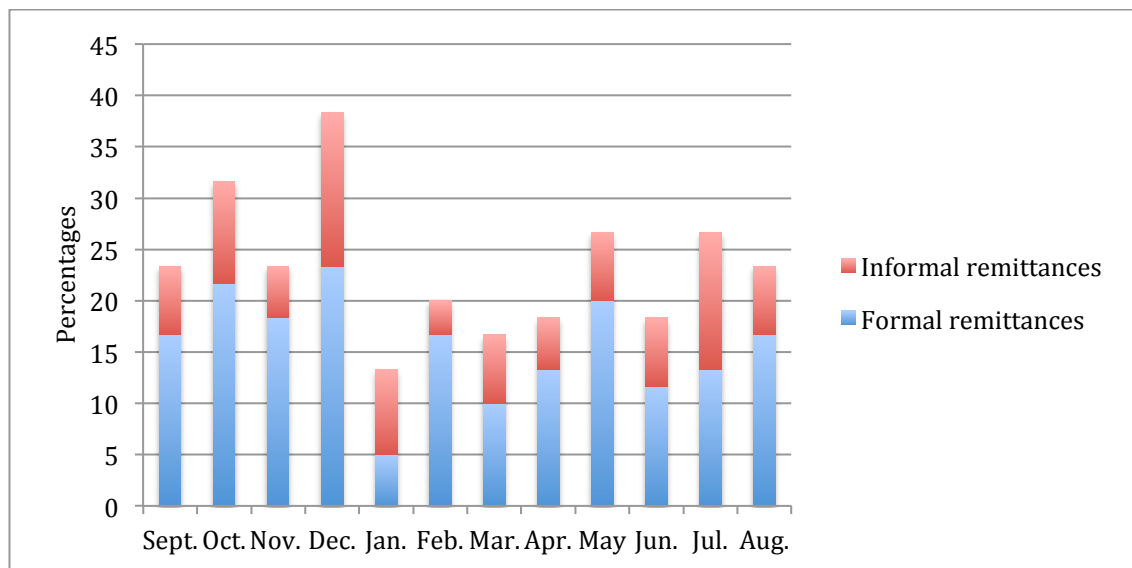
occasions to demonstrate affection to the family. FG participants also explained that the variations in remittances largely depended on fa'alavelave (life cycle events), including weddings, births, funerals and title bestowals. People indicated that fewer remittances were sent in January because they had put more effort into sending money in the preceding month. On a monthly basis, remittances represented about 23.33% of the households' income.

The participants indicated mainly sending remittances through formal channels (66.67%). They principally used money transfer agencies (e.g. Western Union, Pacific Ezy Money) and claimed that the fees applied on transactions was the main factor to choose which one to use. Informal remittances comprised 33.33% of all remittances, within the range of previous studies done in Samoa and Tonga, which estimated unrecorded remittances to comprise between 25% and 60% of total remittances (Brown, 1995; Walker and Brown, 1995).

#### *7.5.2 Disaster and increase of remittances*

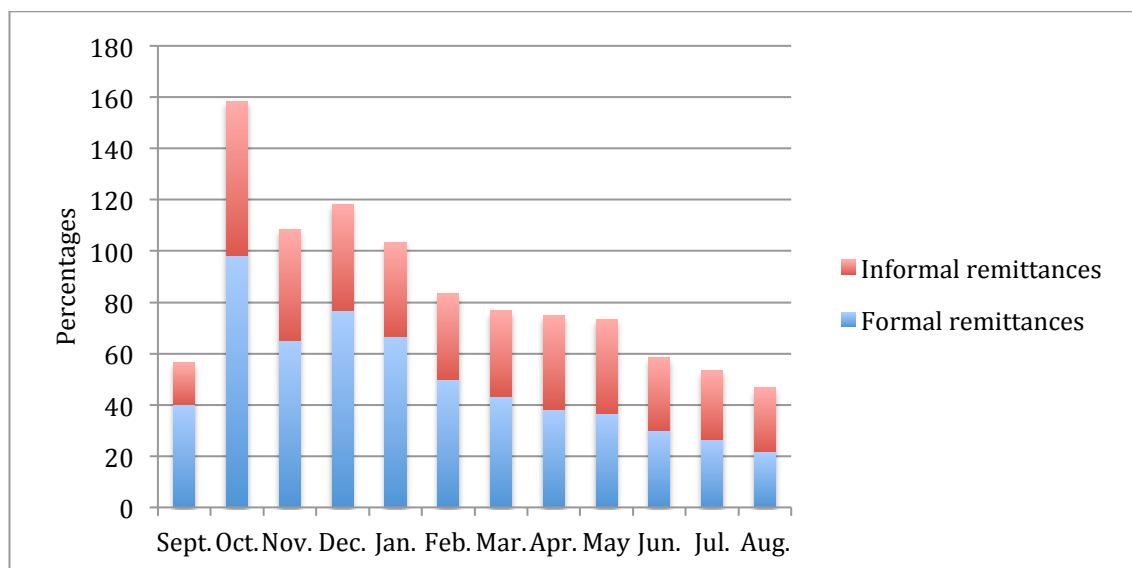
Figure 7.2 presents remittances sent during the post-tsunami year. While the tsunami occurred on 29 September, remittances increased significantly and represented 56.67% of households' incomes for this month. Generally, migrants were informed through the New Zealand and Samoan media as well as from receiving text messages from Samoa. Thus, FG participants explained that they sent money immediately after the disaster happened, sometimes in the following hours. Remittances increased considerably in October, being about 158.33% of the households' monthly incomes, and decreased notably in November (108.33%). More remittances were sent in December (118.33%) and remain above households' income (103.33%) in January. Such levels decreased slowly until August (46.67%).

Figure 7.1: Remittances sent pre-tsunami as share of households' income  
(September 2008–August 2009)



Source: Timeline with proportional piling done in Auckland and Wellington  
(n=13)

Figure 7.2: Remittances sent post-tsunami as share of households' income  
(September 2009–August 2010)



Source: Timeline with proportional piling done in Auckland and Wellington  
(n=13)

Overall, results highlight that migrants sent very high remittances both in the aftermath of the tsunami and in the longer term. The volume of remittances was 3.6 times as high as in a non-disaster year, thus representing 84.31% of migrants' households' income during the tsunami year. This generally meant spending the household's savings, using existing bank loans or requesting new ones, aspects which will be discussed in more detail in the next sections. FG participants were themselves surprised when visualising the data they had beforehand generated, but at the same time recognised that they had played an important role in the recovery process of their families. For example, a research participant explained that her relative lost his tourist accommodation during the tsunami. While there was no formal insurance in place and the government support was not sufficient, remittances were crucial to restart the business activity. Another remitter declared, "without remittances they would not have recovered so well", stating that the financial support provided allowed her family to build two houses and buy a water tank. However, all the remitters asserted that they did not choose the purpose for which the money they sent would be used, which corroborates other studies' results (James, 1997; Le Dé et al., 2015a; Macpherson, 1994). FG participants explained that they were more concerned with helping their family members and fulfilling their obligations towards 'home' than with controlling the use of the remittances. Finally, Figure 7.2 indicates that remittances remained constant throughout the tsunami year, with levels being higher than the households' incomes during four months (from October 2009 to January 2010). FG participants stressed the importance of sending remittances regularly. They acknowledged that the households who recovered well were generally those who received regular remittances, and this was confirmed by most interviewees.

Information presented in Figure 7.2 indicates that more informal remittances were sent following the disaster; but remittances sent through the formal channels were still predominant, representing 58.65% of total yearly remittances. People declared mainly using money transfer agencies, since this was the channel they commonly used before the event. One interviewee explained that she flew to Samoa three days after the tsunami in order to bring

cash to her family. She found this was a 'safer option', as she did not know about the state of the road nor if the formal channels were operating. The other interviewees and FG participants indicated that money transfer agents were a 'fast and easy' way to reach those affected. Moreover, they explained that during the month following the tsunami, most money transfer agents adopted a 'zero fees' policy on transactions, which according to migrants was very helpful.

More informal remittances were sent during the tsunami year, being 41.35% of the total remittances. FG participants remitted through their churches and other organisations based in New Zealand, organising the shipping of containers to support the affected villages. For example, in the aftermath of the tsunami, the Samoan churches of Napier city, where about 61,000 people live, shipped more than 10 containers with goods and food and raised NZ\$ 50,000. Samoan migrants living in Hastings, a neighbouring city of similar population size, also indicated collecting and remitting more than NZ\$ 50,000 through their local churches. All the migrants involved in this research asserted that they had remitted that way, emphasising that it was not only important to help their own family, but also to support the whole community. The reasons provided were generally because of Samoan culture and strong ties existing at community level, with FG participants arguing "the village is like our own family". Furthermore, most of FG participants and interviewees said they had travelled to Samoa within the three months following the event. All of these participants declared that they brought goods such as food, clothing, kitchen utensils, bedding and toiletries. Furthermore, they all affirmed carrying remittances in cash to their relatives, sometimes a "few thousand dollars". People also indicated sending remittances to their relatives via shipping containers, including construction materials and cars.

A higher level of 'informal remittances' was sent after the tsunami, with both a diversification of channels used and changes in the type of remittances sent. In general, the interpretations of unrecorded remittances are quite reflective from the two diverging views existing in the literature on remittances. On one hand, some economists have qualified informal remittances as "hidden transfers"



(Bedford, 1999: 122), which are “an integral part of the family’s international trade and investment activities” (Walker and Brown, 1995: 110). For social scientists, in-kind remittances have important meaning and social function, since they are based on notions of reciprocity and kinship, which are at the core of Pacific islands’ cultural values (Lee, 2003; Marsters et al., 2006). Our findings suggest that for those who travelled and brought remittances in the form of cash or goods, it was a way to provide disaster-affected households with items they lost or needed for their recovery. But more importantly, people unanimously stressed the significance of ‘physically’ visiting relatives and supporting them not only economically but also emotionally. Moreover, in sending items via local churches and other organisations, migrants emphasised the importance of acting collectively, which reinforced their feeling of being active contributors to the recovery of their community of origin.

### *7.5.3 The tsunami as trigger of new remittances patterns*

In investigating the dynamics of remittances as a response to the disaster, we discovered that the tsunami had an effect on the patterns existing pre-disaster. Although before the tsunami all the interviewees remitting declared sending remittances to their close relatives, mainly parents and siblings, after the event two migrants remitted to family members that they never supported through remittances in the past and two others started to remit<sup>6</sup>. Some examples illustrate this. Moana is 45 years old. She was born in Samoa and has lived in New Zealand for many years. She usually sent remittances to her close family, but when the tsunami occurred she started, together with other family members, to help her cousin who was impacted. The cousin owned beach fales (tourist accommodation) that were totally destroyed. Although she had never remitted to him before the tsunami, she started to support him and his family on a regular basis. Because he had no insurance and the government support was not enough, she argued that it was essential to provide him with some financial help.

Elisa is 23 years old. She was born in Samoa and raised in New Zealand. When

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<sup>5</sup> The names of interviewees have been modified to preserve anonymity.

the tsunami happened, her mum who lives in New Zealand knew that one of her cousins was impacted. Although she had no contact with her for the last 10 years, the mum said that she grew up with her cousin and felt that she had to help her. She started to call family members in New Zealand and Australia to organise the sending of remittances. Elisa and her mum went to Samoa twice after the tsunami to support the family. They brought NZ\$ 2000 in cash during the two trips and started remitting on a regular basis together with other members of the family living overseas. Remittances were sent over three years, until the family recovered. Elisa explained that at the time of the disaster her parents spent all their savings and had to postpone repayment of the loan they had on their house, but that the priority had to be given to help the disaster-affected family in Samoa.

Uso is a 32-year-old Samoan who had been raised in New Zealand since the age of four. He did not remit at all before the tsunami, explaining that he does not have any close family to send remittances to. When the tsunami happened, he joined his parents in the sending of remittances, arguing that it was about solidarity with those affected in Samoa. However, at the time of the interview, Uso had stopped remitting.

Taua is 22 years old. She was born in Samoa and raised in New Zealand. She was at high school when the tsunami affected her sister and sister's husband. She had never sent remittances before, but when the tsunami happened she felt that she had to give support to her family. She was babysitting at the time and had some savings that she was keeping to study at the university the following year. Thus, she sent NZ\$ 400 of her savings immediately after the disaster and started remitting regularly. She helped her sister's household for two years until they recovered. She was giving "whatever she could" and also sent in-kind remittances through local churches and organisations. Taua argued that remitting implied limiting her spending in New Zealand and she had to postpone her plan of studying at the university. Since the tsunami, she is remitting about NZ\$ 100 quite regularly, but the recipient has shifted from her sister (during the tsunami) to her father.

These personal narratives show that migrants did not only help the relatives that they were supporting before the tsunami (parents and siblings), but that the disaster modified remittances patterns and even created new ones. While no general conclusions can be drawn from such a small-scale study, this information certainly attests to the complexity of remittances practices and the difficulties of rationalising migrant behaviour. In time of disaster, people may remit because of emotional aspects linked to the event, for reasons of solidarity, and without having any planned 'strategy' or 'goal' in mind.

More generally, this section highlights some of the dynamics of remittances during disaster, including much higher levels of remittances sent, a greater utilisation of informal channels, as well as more in-kind remittances. Hence, migrants seemed to play a significant role in the post-disaster recovery of the Samoan community. At the same time, it appeared that remitting in high proportions and over the long-term had significant impacts on migrants and implications for their daily life. These aspects are analysed next.

## **7.6 Disaster and remittances: impacts and motivations**

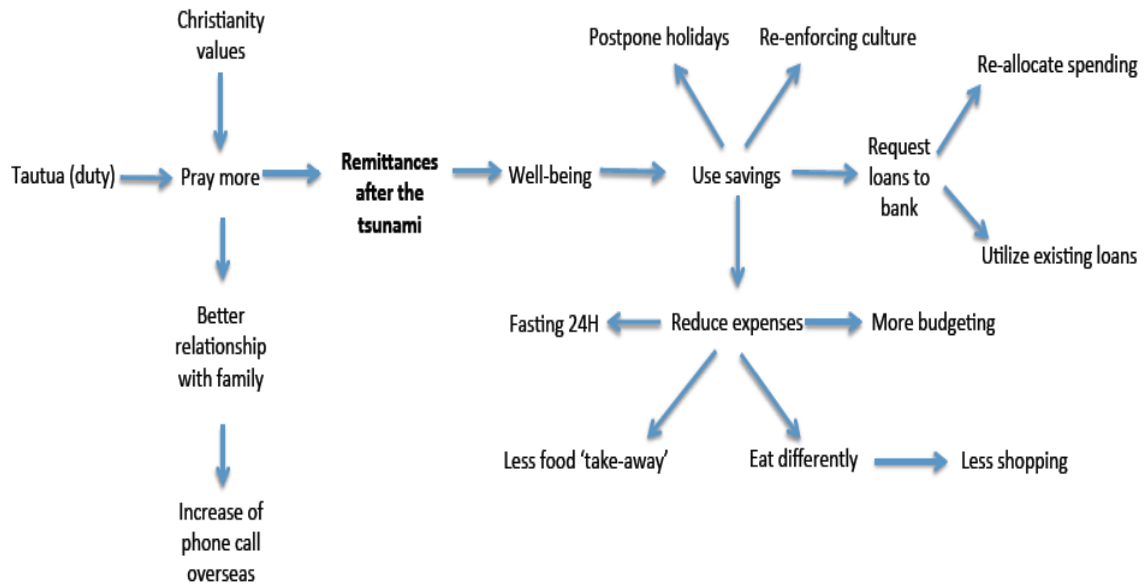
### *7.6.1 Tangible and intangible impacts on migrants*

One objective of this research was the analysis of the impacts that remitting during and after the tsunami had on migrants. Hence, a participatory impact diagram was undertaken with migrants who wrote on cards the different impacts that remittances had on them. Participants were then asked to make links between these impacts with the possibility of removing, modifying or adding new cards (see Figure 7.3). The information provided was then analysed and discussed with the FG participants.

Figure 7.3 shows that remitting in the tsunami context had negative impacts as well as more positive effects on migrants. All the FG participants indicated using their savings to be able to send remittances. One of them said she had used the

credit that had been obtained for the extension of her house. Moreover, three of the participants had to request loans at the bank in order to be able to remit. Most interviewees confirmed similar information and explained that requesting loans to remit was very common for Samoan migrants. Every FG participant said remitting involved reducing daily expenses (e.g. buying cheaper food, less take-away, less shopping to the mall), and being careful with overall budgeting in order to pay the different bills. A FG participant said they had to cancel the holidays planned for the family, while another could not do the warrant of fitness on his car nor pay for the repairs needed. Overall, all the FG participants and most interviewees recognised that following the tsunami, remittances placed a significant financial burden on them. People explained that those struggling the most were the Samoan households with low-income as well as the migrants who were the sole remitter for their family. In addition, some interviewees indicated that they knew migrants who were forced to sell assets and/or entered in a spiral of debt, stressing that remittances in a disaster context could have impacts that are unsustainable economically. However, none of the participants involved in this research had to sell assets nor entered in an economically unsustainable spiral of debt.

Figure 7.3: Impacts of remittances on migrants



Source: Participatory impact diagram done in Wellington (n = 5)<sup>7</sup>

Although remitting had negative impacts on migrants, FG participants also acknowledged the positive effects associated with this practice. Remittances meant better relationships with their relatives in Samoa. Besides, migrants communicated more regularly with the other members of their family based in New Zealand, Australia, American Samoa and the US in order to organise support for those affected. They exchanged information about the recovery of their relatives, discussed the size of remittances to send, and how, when, and who would travel to Samoa. FG participants indicated an increase of communication through the Internet and phone calls. While being sometimes expensive, it strengthened the social ties overall and solidarity between family members located in different countries. For example, if some migrants did not have much money at the time, other family members compensated by sending more remittances. Of course, it meant that the more migrants remitting, the less the

<sup>7</sup> FG participants highlighted 'god blessing' as an ultimate outcome of remitting, but did not know where to locate it on the impact diagram.

likelihood of economic difficulties for some. It also implied that migrants' commitments were multiple, not only towards 'home' but also with other migrants living overseas. FG participants affirmed that remitting contributed to their wellbeing and strengthened their culture. During interviews, people claimed similar benefits indicating that remittances "reinforced their Samoan identity" and made them "proud" to be able to help their relatives back home. Finally, for most migrants the disaster and the resultant acts of remitting were a way to bring the family together. When discussing these aspects with FG participants, they all argued: "What happened there we all feel it" and "if it would happen again tomorrow, we would do it [supporting families] again".

Results confirm that remitting in a disaster context can be economically difficult for the remitters. Such findings are in line with other studies done elsewhere on migrants (Hammond, 2011; Lindley, 2009). At the same time, the act of remitting generated positive effects on migrants (well-being, pride, enhancement of social ties). Surprisingly (from the researchers' viewpoints), all the participants acknowledged that economic impacts were not important compared to the positive effects that remitting had on them. Of course, these elements are intangible and hardly measureable. But as intangible as these impacts may appear to outsiders, their significance to the remitters should not be underestimated (Hammond, 2011). Furthermore, appraising such intangible elements helps us to better understand the meaning of remitting in a disaster context and eventually the motivations for such action (Leslie, 2000).

#### *7.6.2 Migrants' perspectives on their motivation to remit*

While our results indicated that remittances could have very negative implications for the senders, we tried to identify the main motives for remitting. Based on the Venn diagram method, FG discussions and interviews, it was found that remitting in the disaster context was strongly linked with Samoan culture and the central place of the family within it. Migrants explained that as Samoans, it was their "responsibility" and "duty" to help their relatives and community members, even though it could have negative impacts on them. In the Samoan

culture, the notions of responsibility and duty refer to the 'tautua', which means 'the obligation to serve'. The tautua is directed to the family (aiga) and also exists at village (nu'u) level. The tautua is together with help (fesoasoani) "the most fundamental aspect of Samoan culture" and "constantly and inevitably shape the relationship between migrants and their homeland" (Lilomaiava-Niko, 1993: 44). For example, all the migrants stated that it was the duty of the children when getting older to take care of the parents, which is done through remittances when they are away. For others, the tautua was also about showing respect to family members and being able to "walk in the village without being ashamed". Furthermore, it was found that the sense of obligation/responsibility was also associated with love. During both FG and interviews, research participants strongly emphasised that remitting was about demonstrating love to their relatives. For example, one interviewee claimed "it is because of our culture; a culture of love that binds the family together". Another one explained, "This is our small way of expressing our love". The second element shaping remittances was related to migrants' consciousness of the economic difficulties experienced by Samoan people. Interviewees would generally acknowledge the lack of job opportunities, the low wages and overall the limited economic capacities of their relatives based in Samoa. During the tsunami, migrants further explained that the Non Governmental Organisations (NGOs) and government assistance were often not sufficient, thus requiring their support. Thirdly, all the research participants underlined the importance of Christian values linked to the fa'aSamoa, which had influenced their remittance behaviour after the disaster. FG participants and interviewees often stressed that remitting was "also for god's blessing, but without expecting something back".

These elements appeared to be the same that motivated the migrants who started to remit or changed remittances patterns since the tsunami. For example, when asked why she started to remit regularly after the tsunami, Taua answered:

"The way you were brought up will always affect your decisions in the future. We believe our families come first. It has always been our first

priority, so no one was ever forced or asked to help. That is an individual decision. I really did not know how much trouble my sister, her family and the congregation they looked after were in until I saw the images myself. So that is when I started to give more. You see, the lessons we learnt from our parents: when they teach us about the bible, our culture and traditions or just by observing their actions and behaviour, that can affect any decision you make in the future. Good Manners, respect and God are our family foundation and we will carry it on to our children and next generation”.

Statements like this reflect how the economic action of remitting is embedded (and cannot be separated from) in Samoan cultural identity and social relationships. Our research findings indicated that the notions of obligation towards the family, awareness of economic difficulties in Samoa and Christian values already influenced migrants’ behaviour in normal times, but that such cultural and emotional determinants became even more significant during and after the tsunami.

Previous studies have stressed the importance of the cultural value of tautua in migration and remittance practices (Lilomaiva-Niko, 1993; Tamasese et al., 2005). For example, Macpherson (1994) found that the primary purpose for Samoans to migrate was to help their family, in other words accomplishing their tautua, and that personal interest was of secondary importance. The author also made the link between the tautua and love to relatives, writing “an established commitment to remit was the norm because remittances, as many noted, were regarded as tangible evidence of one’s claims to love one’s family” (Macpherson, 1994: 90). Furthermore, other researchers have pointed out the relationship between Christianity, kinship and identity within the Samoan context (Anae, 1998; Lilomaiva-Niko, 1993). In New Zealand, 83.4% of Samoans are affiliated with a religion (Statistics New Zealand, 2013). Indeed, Samoan Catholic, Congregational and other Christian churches often form part of migrants’ life and certainly contribute to the maintenance of Samoan beliefs and values that shape their identity as well as remittance practices (Thornton et al., 2010). For



example, when interviewing Samoan migrants, Muliaina (2001: 32 quoted in Tamasese et al., 2010) found that 95% “were emphatic about their wish to continue remitting for the rest of their lives. They saw it as an inseparable part of their identity and in keeping with the teaching of the church”. In the same vein, Evans (2001) argued that for Polynesians, economic and cultural factors cannot be separated.

## **7.7 Discussion and conclusions**

This paper aimed to address three objectives: exploring the dynamic of remittances in a disaster context, appraising the main elements shaping migrants’ behaviour and analysing the impacts that remitting during and after the tsunami had on migrants.

We identified that the tsunami had diverse effects on the remittance patterns that existed pre-event. Migrants sent higher levels of remittances, used informal channels to a greater extent, sent more in-kind remittances and not only remitted to relatives but to the broader community. In addition, some migrants started to remit to their extended families, while others who never remitted in the past began to send remittances, thus representing ‘new remittances patterns’. Overall, our results highlight the significant assistance provided by migrants to disaster-affected people, indicating that remittances may help to compensate for the absence of insurance and lack of a social security system in Samoa. In that sense, it confirms NELM and livelihood approaches which claim that remittances represent, for the households in the country of origin, a source of income that allows the absorption of the shocks related to a disaster and helps in overcoming local economic and institutional constraints (Ellis, 1998; Taylor, 1999). Nonetheless, our findings related to the ‘new patterns’ of remittances appear contradictory to the NELM co-insurance hypothesis. The migrants who started remitting to their extended family as well as those who had never remitted in the past were not part of any contractual agreement that would have implied the repayment of loans, debts or any financial support received

previously. Our results rather suggest that the disaster represented an emotional stimulus for migrants and remitting was a way to express their cultural identity and reaffirm their affection for, and solidarity towards, their family and the broader communities. This certainly points out some of the conceptual problems of NELM co-insurances that perceives remitters as economic agents who act rationally in relation to a contract and/or in pursuit of economic welfare (Lianos, 1997). As some authors suggest, the act of remitting may not necessarily be guided by a preconceived strategy (De Haas, 2007), nor can migrants' behaviour be dissociated from emotional and cultural elements (Lindley, 2008). Although, our results indicated that within a disaster context, emotions and cultural values could be crucial aspects that guide remittances, even though such elements are difficult to capture through statistical and survey techniques.

Secondly, the paper identified that during the tsunami, migrants remitted because of (1) a sense of obligation/responsibility to assist the family, (2) a consciousness of the economic difficulties experienced in Samoa and (3) religious values. While NELM theories and most economic-based studies greatly emphasise the self-interest motives (Brown and Ahlburg, 1999; Rapoport and Docquier, 2006), we rather found that during the tsunami, migrants remitted because of their cultural identity, social relationships and the importance of the family within these. Eventually, rather than utilising remittances for investment in particular assets and to improve their economic wealth back home, remitters were more concerned with fulfilling their duty to assist their relatives. As different social scientists have noted, Samoans do not exist solely as individuals but usually in relationship with their family and other community members (Thornton et al., 2010; Todd-Oldehaver, 2004; Waldegrave et al., 2003). Schmidt (2003: 418) argues that in contrast to the "individualistic self of the west", "Samoan identities are predominantly sociocentric and relational and occur as a series of contextual, situational and collectivist arrangements". In the same vein, in their conclusion of the study on Pacific island families, Pasikale and George (1995: 68-71) wrote: "family and collective need has priority over individual need" and "meeting these cultural imperatives are necessary to fulfilling the Pacific Islands person's sense of place within their cultural group, to both

confirm identity and to demonstrate affiliation”. Of course, it is not suggested here that the motivation to remit was solely linked to collectivist arrangements, love and the central importance of the family within these. The diverse financial and structural constraints existing in the country of origin certainly influenced migrants’ remitting behaviour, including the limited economic capacities of Samoans affected, the lack of insurance system and insufficient government and NGOs support following the tsunami. In addition, the sense of obligation and cultural values surrounding remittance practices represent some norms that may exert pressure for those members who share them (Brown et al., 2012; Macpherson and Macpherson, 2009). Nevertheless, what the present results highlight is that migrants’ sense of obligations to their relatives and villages remained very strong, and the expression of their identities and cultural values through these commitments were particularly important in shaping their remittances behaviour during and after the disaster.

Eventually, a relevant question is whether or not the behaviour of Samoan migrants, shaped by a singular socio-cultural construct, is applicable to other parts of the world. To some extent, the conclusions from some other researchers suggest this. For example, in her study on Tongan migrants, Lee (2003) emphasised that the Tongan term for remittances is ‘kavenga’ which means ‘a burden or load’, but which is utilised to refer to a sense of obligation to kin (fatongia). She also linked obligation with love quoting Mele Fuka Vete: “the amount and frequency of remitting to parents are taken as measures of one’s love” (Vete, 1995: 62). Similarly, when interviewing Somali refugees in an armed conflict setting, Horst (2008) argued that for remitters, assisting those facing a crisis was a “religious and cultural obligation”. The author explained that for migrants, obligation referred to a form of social obligation or “responsibility of the individual as a member of a larger whole” (Horst, 2008: 128). Still in the Somali refugees context, Lindley (2009: 5) noticed that for migrants it was an “Islamic duty to assist their family and people in need”. As anthropologists have demonstrated, humans’ economic actions cannot be separated from their social relationships and cultural constructs (Polanyi, 2001). Taking these non-economic dimensions into account and appraising their dynamic during

disasters is necessary if one wants to understand migrants' remitting behaviour.

Finally, the paper identified that remitting in a disaster context could represent a strong financial burden on Samoan migrants. It was found that in the year following the tsunami, migrants sent the equivalent of 84.31% of their household income, and that during four months they sent more than their household income. This implied some negative economic effects on a day-to-day basis. Impacts included reducing daily expenses, utilising savings and reallocating or requesting bank loans. Such findings corroborate other studies' conclusions (Hammond, 2011; Lindley, 2009) and underline that while remittances provide strength for those receiving them, they may increase the economic vulnerability of the senders. This raises some developmental questions, such as the long-term effects that remittances may have on the livelihood of the senders. Overall, such results emphasise that a greater consideration of migrants' perspectives may help to improve our understanding of remittances processes. Nonetheless, while remitting during and after the tsunami had negative economic impacts, we found that it also had positive and more intangible effects, such as enhancing cultural identity and fortifying the ties existing amongst family members. Other researchers have focused on the intangible implications linked to remittances, indicating that beyond the exchange of money and goods, the act of remitting also involved the transfer of ideas, behaviour, identities and values (Lee and Francis, 2009; Leslie, 2000). Levitt (1998) was one of the first scholars to focus on what she called 'social remittances'. The author identified three main elements of exchange linked to remittances, including normative structures, system of practice and social capital (Levitt, 1998). Our results suggest that such intangible impacts were very important to migrants and explain some of their main motives to remit, being aspects that economists tend to neglect in their analysis of migrants' behaviour.

Furthermore, our results show that the impacts linked to remittances were not only bilateral (between migrants and home), but rather multiple (involving different migrants at transnational level). We found that remittances implied the exchange of information, organisation, commitments, decisions and actions

amongst different migrants living in different countries. Hence, the interaction between the different group members seem to fit with the concept of transnationalism and transmigrants as defined by Basch et al. (1994: 1 – 2): “Transmigrants develop and maintain multiple relations – familial, economic, social, organisational, religious, and political that span borders. Transmigrants take actions, make decisions, feel concerns, and develop identities within social networks that connect them to two or more societies simultaneously”. Thus, such transnational perspectives certainly point out the inappropriateness of the dominant approaches in conceptualising remittances in function of the dichotomy origin-destination and with the household as sole decision-making unit (De Haas, 2007). Moreover, the notion of transmigrants and transnational communities raise questions about the maintenance of remittance practices through time. In his study of Samoan and Tongan migrants living in Australia, Brown (1997a) concluded that as long as migrants keep strong ties with the home country and continue to keep wanting to return home, there was no reason for remittances to decline. It would be an over-statement to assert that because of the strengthening of social ties at a transnational level, migrants will no longer hope to return home at some point. However, we suggest that if remitting is strongly related to notions of identities and social ties (as it is indicated in this study and by other authors), the strengthening of identity and ties at a transnational level challenges the assumption that remittances will decrease through time. Ultimately, this supports the idea that those transnational communities may become more resilient in facing future disasters, a notion that requires further investigation.

Finally, our findings certainly stress the need for policy-makers and organisations involved in disaster risk management to better appraise the role of migrants and remittances in their relief actions and recovery programmes. On the other hand, this paper demonstrated the important financial burden and negative economic implications that remitting may have on migrants. Results suggest that more attention should be paid to migrants with low-incomes and those who are the sole remitters for their families. Ultimately, more research is needed on the impacts that remitting during crises has on migrants.

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## Chapter 8 Remittances and disaster: Policy implications for disaster risk management

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Le Dé L., Gaillard J. C. and Friesen W. (2015) Remittances and disaster: Policy implications for disaster risk management. *Migration, Environment and Climate Change: Policy Brief Series*. International Organization for Migration (IOM) 1(2):1-9.

### 8.1 Introduction

In the last few years, remittances sent to low-income countries have been noticeably increasing, reaching about US\$ 404 billion in 2013 (World Bank, 2014), more than three times the level of Official Development Assistance. For the households of these nations, remittances often represent an important source of income. During and after disasters, remittances may become even more important to deal with emergency and recovery needs (Fagen, 2006; Wu, 2006). Building on local people's resources, in ways that are culturally, socially and economically accepted creates the conditions for successful and sustainable disaster risk management (DRM) (Gaillard and Mercer, 2013). Yet, this people-based mechanism is largely disregarded by agencies involved in DRM, who rarely take into account remittances within their relief actions and recovery programmes (Le Dé et al., 2013). This brief provides potential policy options to integrate remittances within current DRM practices. Policy recommendations are based on research conducted in Samoa and New Zealand, which aimed to investigate the role of remittances in a disaster context.

## 8.2 The research project

The study took place in Samoa, a country located in the South Pacific. This nation is highly vulnerable to natural hazards and has experienced recurrent disasters in the last few decades. Samoa is the sixth largest remittance receiver worldwide, and remittances to the country account for the biggest share of its GDP (World Bank, 2014). Fieldwork was also carried out among remittance senders in New Zealand, where most Samoan migrants live. In September 2009, a tsunami hit Samoa, impacting the communities living on the south-east coast of the country. A total of 143 people died and 5,000 became homeless.

Figure 8.1: Damages from the 2012 cyclone Evan, Tafitoala village, Samoa



In December 2012, cyclone Evan impacted Samoa, leading to significant material damage and seriously affecting people's food resources in some villages (see Figure 8.1). The project involved five coastal communities affected by the 2009 tsunami, one of which also suffered severe losses as a consequence of cyclone Evan. A total of 82 interviews were carried out in these communities. In addition,

participatory activities (e.g. proportional piling, carousel, timeline, scoring, wheel of livelihood)<sup>8</sup> were undertaken within four communities. Participatory tools (see Figure 8.2) allowed for the collection of qualitative and quantitative information (for more details, see Le Dé et al., 2014).

**Remittances and disaster: Why use participatory techniques?**

The rationale for using participatory tools for assessing remittances in a disaster context lies in their capacity to reflect the view of those directly concerned and produce data that more conventional methods, such as econometric techniques and questionnaire-based surveys, can hardly gather. The different participatory activities involved groups of 5–20 people producing quantitative (e.g. timeline with scoring technique, proportional piling, wheel of livelihood resources and matrix scoring) and qualitative (e.g. carousel, Venn diagram, impact diagram, and analysis and explanation of the information produced) data. Many of these participatory techniques have been used in different locations and research contexts (e.g. Kumar, 2002; Narayanasamy, 2009). The different tools used in this research were often combined and adapted to the remittances and disaster context.

Such a methodological approach had never been used to assess remittances. Some of the research findings are outlined in the next section (for more details, see: Le Dé et al., 2015a; Le Dé et al., 2015b).

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<sup>8</sup> See textbox on remittances and disaster.

### **8.3 Remittances in times of disaster: An overview**

In Samoa, like in many Small Island Developing States (SIDS), remittances are important to sustain people's everyday needs. In times of disaster, affected populations may receive remittances very quickly, often providing more timely assistance than aid from government, non-governmental and international actors. After the tsunami, 90% of disaster-affected households received international remittances, and of these, 72% received them within a week after the event. Even though telecommunications networks were affected, people lost their cell phones and road systems were severely damaged, 17.5% accessed remittances the same day of the tsunami, 24.5% within one and three days, and 30% between three days and one week after the event. Remittance receivers could deal more easily with emergency needs, such as purchasing food and clothing or getting health-care treatments. After cyclone Evan, remittances contributed to balance the lack of agricultural production and counter food insecurity.

Remittances usually remain high long after the disaster. Following the tsunami, amounts received were higher than usual for six to seven months before coming back to standard levels. Results of the research indicate that remittances increased when government and non-governmental assistance was low, and decreased when such external aid was more substantial, thus acting as a kind of safety net. The consistency of remittances through time represents one of the strengths of this mechanism. Clearly, the households that received higher amounts and/or regular remittances were more able to deal with emergency needs and recovered faster and better, such as by more quickly rebuilding their house, restarting agricultural production, and paying school fees, than the community members with no or reduced access to this resource. These findings fit with other studies done in other countries (Deshingkar and Aheeyar 2006; Suleri and Savage, 2006; Wu, 2006).

Remittances represent a powerful mechanism to face disasters and have a propensity to reduce vulnerability (Suleri and Savage, 2006). Yet, they are

generally received by middle and upper-income families, the poorest usually having lower levels of access to the international labour market (e.g. low level of education, insufficient funds to pay for visa and transport, limited networks abroad) (Taylor et al., 2005; Mazzucato et al., 2008). Our findings indicate that in a disaster context remittances tend to increase or at least reproduce both the inequalities and vulnerabilities existing within the community of origin (Le Dé et al., 2015b). Following cyclone Evan, poor households with no access to remittances were often forced to adopt unsustainable livelihood strategies, such as limiting their food intake, selling the food not affected by the cyclone, using their savings, requesting credit from neighbours and/or extended family, and having to rely on assistance from Non Governmental Organisations (NGOs).

Figure 8.2: Timeline with scoring technique, Salani village, Samoa



Although the poorest generally have lower access to remittances, this mechanism has indirect economic and sociocultural benefits for the whole community. After both disasters, remittances allocated to the rebuilding of housing and agricultural production contributed to generating economic activity



at the local and national levels (e.g. stimulating demand for labour, services and construction material). Moreover, remittances were used for funding the reconstruction of churches and other projects at the community level, thus contributing to the recovery and well being of the village as a whole (including households receiving little or no remittances). In addition, remittances were sometimes shared with relatives or neighbours struggling to meet basic needs.

During and after the tsunami, migrants sent higher levels of remittances through informal channels instead of through the banking system and money transfer agencies. These 'informal' remittances included goods, cash, and construction materials, which were shipped in containers and/or hand-carried. Remittances provide flexibility of use and can be utilised to fit people's specific requirements. When received in the form of cash, remittances can be used according to the disaster-affected households' priorities. Remittances in the form of goods had usually been communicated with distant relatives, thus addressing the receivers' needs (e.g. replacing lost items). External assistance does not always provide this flexibility, as recovery programmes can be constraining, with criteria within which people do not always fit. Besides, aid items are sometimes duplicated and/or not adapted to people's needs.

In addition, remittances cannot be reduced to money and goods. Remittance practices are also the expression of social and cultural ties (Levitt, 1998). In this research, disaster-affected households indicated the importance of being morally supported by their relatives. Phone and Internet communications as well as visits by migrants coming back to Samoa provided great emotional support, contributing to effective recovery. For Samoan migrants, remitting was about complying with sociocultural obligations towards home, notions of identity, proudness, and showing love to distant relatives. Migrants remitted to their families, which reinforced geographically stretched social ties. They also supported their villages and the broader Samoan community through local churches and organisations based in New Zealand.

Research findings indicate that migrants played a central role in the capacity of the disaster-affected households to cope with and recover from the event (Le Dé et al., 2015a; Le Dé et al., 2015b). At the same time, remitting could have strong economic impacts on migrants themselves. In the months following the 2009 tsunami, many migrants sent more than what they had earned, which implied using their savings, reducing daily expenses, and requesting or reallocating bank loans, thus potentially increasing their economic vulnerability.

## **8.4 Policy implications**

Findings from this research have significant implications in terms of DRM policy. Some recommendations aiming to integrate consideration of remittances within current DRM practices are provided in this section. These recommendations are summarised in Table 8.1.

### *8.4.1 Ensuring that remittances flow can take place*

Although remittances are not a substitute for government response or external aid, migrants can often react faster and thus fill an important time gap. Disasters may damage communication systems and roads, and affect people's ability to access remittances. Thus, governments, in close collaboration with the private sector and international organisations, should ensure fast reestablishment or continuity of remittances flow.

During disasters, the financial system may be disrupted, sometimes for days. Governments and international organisations should coordinate with money transfer agents (e.g. Western Union, Pacific Ezy Money) and private banks to rapidly restore it. In the case of damaged roads, governments could provide a service of transport to money transfer agencies and banks. Moreover, different channels other than money transfer agencies and banks are available. For example, sending of money through mobile phones is increasingly used worldwide (e.g. Dalberg, 2012; Siegel and Fransen, 2012), providing a quick,

cheap and accessible option, particularly important for remote areas. Hand-carried goods and sending of shipping containers also provide channels that governments, together with external aid agencies and the private sector, should build on. For example, in the aftermath of the 2010 earthquake in Haiti, airlines serving Haiti permitted migrants to send items free of charge. The airline companies also transformed their frequent-flier programmes into a mechanism to support Haitian aid (Lundy, 2011).

Making sure that affected people are able to communicate with their relatives living abroad and/or in the country is indispensable. Governments should guarantee quick reestablishment of telecommunications systems, and telecommunications companies certainly have a role to play, too. Immediately after the 2009 tsunami, Digicel, the major cell-phone operator in Samoa, provided affected people with cell phones and free communication overseas for one month. According to those affected, this service was very useful. Such is a good practice that might be systematically replicated when disasters happen; however, it will require coordination between governments, international and non-governmental actors, and telecommunications companies. In addition, utilisation of the Internet and social media is becoming more popular, even in remote places. Relevant actors may provide disaster-affected people with Internet access in relief centres, temporary shelters, evacuation and displacement sites, and/or work with the private sector to deliver such services for both short-term assistance and longer-term recovery.

Table 8.1: Main policy implication for disaster risk management

<p>Ensuring that remittance flows can take place</p>	<ul style="list-style-type: none"> <li>• Ensure fast reestablishment or continuity of financial and telecommunications systems.</li> <li>• Provide impacted-households with transport to money agents and banks.</li> <li>• Build on alternative channels available.</li> <li>• Make Internet access available in relief centres, temporary shelters, and evacuation and displacement sites.</li> </ul>
<p>Documentation and family tracing</p>	<ul style="list-style-type: none"> <li>• Put in place special measures such as temporary identity cards.</li> <li>• Restore and maintain contact that has been lost with relatives that are abroad and/or within the country.</li> </ul>
<p>Building on migrants to improve aid assistance</p>	<ul style="list-style-type: none"> <li>• Inform migrants on whether formal channels are operative, and, if not, provide them with alternatives.</li> <li>• Adopt a zero-fee policy during disasters.</li> <li>• Adopt a zero-fee policy or significant reduction of transfer fees in the longer-term recovery.</li> <li>• Give the possibility to migrants to travel back home without losing their jobs.</li> <li>• Give migrants visa flexibility to be able to return to the host country.</li> <li>• Facilitate migrants' movement to their home country and within the disaster-impacted country.</li> <li>• Invest in budget management training towards migrants and remittance receivers.</li> </ul>
<p>Integrating remittances within post-disaster assessments</p>	<ul style="list-style-type: none"> <li>• Integrate remittances in vulnerability and capacity assessments for targeting post-disaster assistance.</li> <li>• Improve social protection systems to better target certain sectors of the population without access to remittances (e.g. the elderly, female-headed</li> </ul>

	households).
Including remittances within recovery programmes	<ul style="list-style-type: none"> <li>• Ensure that aid provided for recovery (e.g. housing reconstruction, supporting livelihood programmes) can be complemented with households' remittances.</li> <li>• Include mechanisms that take into account remittances as income stream for households.</li> <li>• Give poor households without access to remittances priority when migration policies are set up in the aftermath of disasters as part of recovery plans.</li> <li>• Provide those who lack access to remittances with the skills and support required to fit into specific migration policy schemes.</li> </ul>

#### *8.4.2 Documentation and family tracing*

During disasters, people may lose their identity documents (Suleri and Savage, 2006). While this is not only a problem for accessing remittances, proof of identity is usually needed to receive transfers through formal channels. It is a government responsibility to replace such documents, which during and after disasters may be crucial to ensure remittance flows. Alternatively, governments may put in place special measures, such as temporary identity cards, to enable those who have lost their identity documents to access remittances.

In a disaster, affected people may lose contact with their family members within the country or overseas, thus affecting their ability to access remittances. The International Committee of the Red Cross (ICRC), with its Restoring Family Links programme, allows family members to restore and maintain contact that has been lost in the case of disasters, conflicts and forced migration through the establishment of satellite communication systems (ICRC, 2014). Organisations with such technical knowledge should consider enabling the transfer of remittances within their programmes. Besides, reconnecting family members is a service that a government should provide to its own population as part of relief

efforts, and remittance is another reason for further investing in family tracing (Savage and Harvey, 2007).

#### *8.4.3 Building on migrants to improve aid assistance*

Both national and international agencies involved in DRM should also work with migrants for their relief actions and recovery programmes. Firstly, migrants need to be informed on whether or not formal channels are operative, and if not, be provided with alternatives for sending remittances. Secondly, fees applied on remittances are an important factor defining the amount and frequency of transfers. During the first month after the tsunami, most money transfer agents adopted a zero-fee policy on remittance transfers. Such policy was replicated in the aftermath of the Haiti earthquake (Lundy, 2011). Hence, the establishment of a zero-fee policy during disasters could be adopted as a best practice. Zero-fee policy or significant reduction of transfer fees could be extended to a period of a few months following a disaster, potentially encouraging migrants to remit more and utilise more formal channels. Moreover, the cost of sending remittances is generally high and regressive (Ratha, 2007). Since transaction fees tend to be more elevated for small amounts, it means that migrants with limited financial capacities are disadvantaged compared with more wealthy remitters. Thus, a zero-fee policy (or significant reduction of these fees) in the long term may encourage the remittance of small amounts but on a more regular basis.

Migrants should also have the possibility to travel back home to support family members for a certain period of time without losing their jobs. After the tsunami, an agreement between the Samoan and New Zealand Governments permitted Samoan migrants to travel home and stay for one month to assist their relatives. According to the affected households, this measure provided great emotional support and certainly helped in facilitating 'informal' remittance transfers, including in the form of clothes, kitchenware and cash. This policy could be replicated and extended to other countries where important transnational communities live. Such policies would also imply agreements between governments to ensure visa flexibility for migrants to come back to the host

country. In addition, aid agencies and governments could facilitate migrants' movement to their home country and/or within the disaster-impacted country to enhance and facilitate the transfer of internal remittances.

Remitting for months after disasters often represents a heavy financial burden on migrants, sometimes leading to a spiral of debt and increased economic vulnerability. In some cases, migrant workers may not be able to come back to their country of origin and have to stay overseas for a longer period than originally planned (IFAD, 2013). To reduce the risk of such unsustainable livelihood strategies, governments and international organisations should invest in budget management training programmes for migrants. For example, the NGO Atikha Overseas Workers and Communities Initiative gave training to 1,500 Filipino workers living in Italy for better financial planning, savings and investments (IFAD, 2013). In the same vein, Diaspora Investment in Agriculture initiated projects that encourage migrants to sustain economic development by investing remittances in agriculture in the communities (IFAD, 2013). Such approaches may create a bridge between post-disaster and development and ultimately reduce the risk of disasters.

Furthermore, our findings indicate that remittances are often used for meeting basic needs rather than for investment in productive assets. Different studies also point out that households' economic dependence on remittances may be high, so livelihood strategy can be unsustainable in the long term and risky if this source of income is stopped (Wu, 2006). Hence, budget management training programmes aiming at more sustainable use of remittances should also involve remittance receivers. Participatory approaches should be applied to the design, implementation and evaluation of such programmes.

#### *8.4.4 Integrating remittances within post-disaster assessments*

Our findings suggest that in Samoa there is a link between remittances, affluence and vulnerability. People with limited or no access to remittances were more vulnerable socially because their social networks are weaker than those of other

community members. They were more vulnerable economically, because they cannot utilise remittances for savings to invest in productive assets or direct them to higher-level education, but rather have to use remittances to meet everyday needs. Their houses were also more vulnerable since their lack of access to remittances does not permit them to afford the use of hazard-proof techniques and materials. This part of the population became even more vulnerable after a disaster in different ways: lack of access to remittances often forced them to adopt unsustainable livelihood strategies, including skipping meals, spending their savings, and having to rely on aid from NGOs and rich neighbours to deal with basic needs. Moreover, not being able to allocate resources to village and church expenses could imply losing social and political position within the community, which potentially influences their access to further assets and opportunities. In addition, we found that remittances are a form of traditional social protection system, which fits with other studies done in Samoa (Amosa and Samson, 2012) and elsewhere (Schrieder and Knerr, 2000; Wu, 2006). Hence, during and after cyclone Evan, the elderly and vulnerable individuals, such as members of female-headed households, irregular wage earners, and landless people with no remittances, were among those struggling the most. This suggests that improving assistance targeting the most vulnerable requires better appraisal of who has and has no access to remittances and their significance in households' livelihoods. For governments, it certainly means improving social protection systems and developing mechanisms that better target this group of the population.

#### *8.4.5 Including remittances within recovery programmes*

Remittances frequently allow people to complement governments', international organisations' and NGOs' recovery programmes through their own investments. For example, our research showed that remittances were often used to complement housing programmes to improve or strengthen new dwellings. However, external assistance to housing often comes in the form of pre-designed or even ready-made homes. This may be incompatible with households' investments, fuelled by remittances and their desire to improve housing in



relation to their perception and priorities. Thus, governments and organisations involved in DRM should ensure that aid allocated to reconstruction is provided in the form of cash or vouchers to allow households to complement these with remittances. Again, this implies the participation of beneficiaries in the design and implementation of such programmes.

Furthermore, supporting long-term recovery requires taking into account remittances as an income stream for households. For example, in Senegal, a project provided families receiving remittances with loans for the purchase of land, housing construction and/or improvement, and acquisition of existing houses. The loan scheme involved a compulsory saving period with a minimum level of savings. As a result, more than a hundred families could obtain a loan without a mortgage guarantee and started saving money from the remittances received (IFAD, 2013). Following cyclone Evan, the Government of Samoa set up a Credit Line Facility for the disaster-impacted households that had relatives overseas who could pay the loans or serve as a guarantee. This scheme allowed these households to get a housing loan with 3% interest rather than the usual 10% interest. At the same time, particular attention should also be given to those without access to remittances. In Samoa, households without migrants overseas could not access the Credit Line Facility scheme.

Migration with intention to remit is also one of the mechanisms used by disaster-affected households to cope with the impacts of hazards. However, poor households without access to remittances generally cannot adopt such a strategy since they usually have weak transnational (or national) social networks and limited economic capacities (e.g. to pay for transport and visas). Hence, governments should give them priority when migration policies are set up in the aftermath of disasters as part of recovery plans. This was the case of the Government of the Republic of Korea, which, in the aftermath of the 2004 tsunami, gave priority to migrants from affected areas in the 2005 roster of applicants for the Employment Permit System (Naik et al., 2007). In addition, these individuals should be provided with the skills and support required to fit into specific migration policy schemes. Cooperation between governments

would help enhance such mechanisms. For example, following the 2010 Haiti earthquake, many Haitians who had established networks in the United States migrated to remit back home. The U.S. Federal Government provided Haitians with a temporary protected status for 18 months. Such policy enabled more than 200,000 Haitians to work in the United States without fear of being deported so they could support their relatives in the long-term through remittances (Lundy, 2011).

## **8.5 Conclusion**

Drawing on a research project based in Samoa and New Zealand, this article points out the need to take into account remittance flows when designing and implementing post-disaster interventions. The paper identifies some policy measures adopted during and after the disasters that occurred in Samoa and in other countries, and which could be replicated in other comparable settings. Other potential policy options aiming at including remittances within existing DRM practices are provided. This may require, on one hand, a better understanding of remittances' role and impacts for both receivers and senders, and, on the other hand, greater collaboration between governments, aid agencies and the private sector.

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## Chapter 9 Conclusion

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### 9.1 Introduction

The origins of this thesis lie on one hand with the rising concerns of the international community with the disproportional occurrence of climate-related disasters in Small Island Developing States (SIDS). Reduction of SIDS's vulnerability to disasters is one of the Hyogo Framework for Action (HFA) priorities (HFA, 2005-2015: 5). On the other hand, this thesis was initiated because of the increasing importance of remittances in most SIDS's economies and the identification of their potential role in the face of disasters (Connell and Brown, 2005; Muliaina, 2003). Research initiated by the Overseas Development Institute (ODI) in the mid-2000's was the first to identify the importance of remittances in people's struggle to deal with crisis (Deshingkar and Aheeyar, 2006; Suleri and Savage, 2006). Increasingly, studies point out that remittances may intensify considerably during disasters and may act as a kind of informal insurance to shocks (Mohapatra et al., 2009; Ratha and Sirkeci, 2010). In the last decade there has been an increase of research interest in remittances in disaster (Le Dé et al., 2013). However, very little is known about the role and significance of remittances in the face of disasters, the long-term effects of remittances in recovering from such events, and the impacts remitting may have on migrants who try to help their relatives affected by disasters.

Most of the existing studies have focused on the short-term effects of remittances during crisis (Suleri and Savage, 2006; Wu, 2006). Moreover, research on remittances has been (and is still) dominated by economic approaches, generally using econometric methods and tending to focus on the impacts of remittances on the receiving countries (Amuedo-Dorantes et al., 2007; Mohapatra et al., 2009). While generating useful quantitative data, this approach has provided limited information at local scale and generally fails to integrate the social and cultural elements influencing remittances practice. Another part of the

literature, mainly by sociologists and anthropologists, has been critical of this economic approach for its tendency to solely focus on economic motives and outcomes in determining households' decisions to utilise remittances (Hammond, 2011; Marsters et al., 2006). This more 'social' approach to remittances has pointed out that notions of social ties, normative structures, and cultural identity are central to this practice (Hau'ofa, 1993; Lee and Francis, 2009; Leslie, 2000; Levitt, 1998; Marsters et al., 2006). While indicating that understanding remittances involves taking into account the ideas, beliefs, values and feelings attached to this mechanism, this approach has commonly not provided quantitative information on remittances, including at local level, which however, appears indispensable if one wants to appraise the significance of this mechanism in disasters.

This thesis aimed to tackle this knowledge gap. It identified the need for adopting a sustainable livelihood framework in investigating remittances in disasters (Le Dé et al., 2013). An attempt was made to produce quantitative data that are tangible and communicable to policy makers and agencies involved in Disaster Risk Reduction (DRR) and Disaster Management (DM). At the same time, the thesis aimed to generate qualitative information on remittances, which is indispensable to understand the reasons, role and impacts of this strategy in people's efforts to overcome disasters. This thesis is novel in its utilisation of participatory tools to explore different aspects of remittances in disaster. This methodological framework had, to our knowledge, never been used before and provides new data produced with and by disaster-affected households. While originally focusing on SIDS, the information presented in this thesis is relevant to more global contexts, methodologically, conceptually, and at policy level. This final chapter first summarises the key findings of this thesis and discusses the implications and challenges for disaster risk reduction and disaster research. It also sets some of the limitations of the thesis and outlines further research needed.

## 9.2 Key research findings

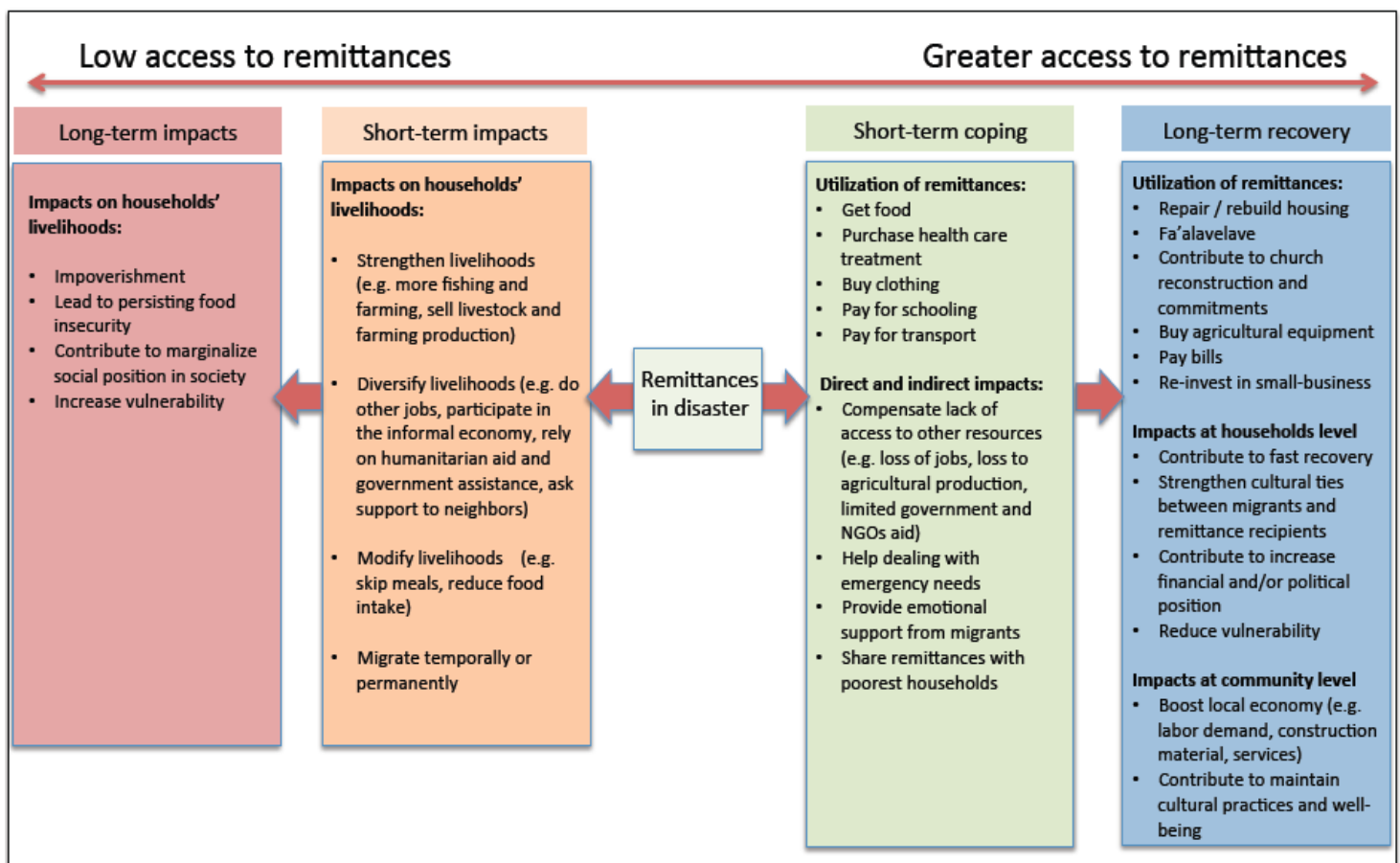
*Objective 1: To investigate the importance, role and impacts of remittances in households' livelihood strategies to overcome climate-related disasters.*

The first objective of this thesis was to understand the role and impacts of remittances in households' strategies to cope with and recover from disasters (see Figure 9.1). Findings indicate that in time of disaster, remittances can be very fast in reaching those affected. In Samoa, 72% of affected people received remittances within a week of the tsunami of 2009 (Le Dé et al., 2015a). Similarly, high volumes of remittances were sent in the days following cyclone Evan. Remittances allowed recipients to purchase food, clothing, health care treatment, and overall provided them with a greater capacity to deal with emergency needs and security issues than non-recipients. This mechanism was also central to households' recovery since remittances were received in higher proportions and in a constant fashion long after disasters (Le Dé et al., 2015a). Remittances helped households in repairing and rebuilding impacted houses, and in buying agricultural tools and restarting farming activity. Remittances do not only have economic and material implications; this practice is rooted in people's everyday life, since they involve their social networks, generally close relatives that have migrated. It implies notions of mutual help, sharing, and love, which are embedded within beliefs, norms, and cultural values shared by remitters and recipients (Levitt, 1998). Findings indicate that in a disaster context this practice may generate intangible outcomes such as self-esteem, strengthening of cultural identity, and well-being, elements which appear significant both in short-term coping and in the longer-term recovery (Barakat, 2003; Barenstein, 2006; Daskon, 2010).

Results showed that remittances are part of a livelihood system and interact with existing (e.g. farming, fishing, small businesses, job-related wages, savings) or claimed resources (e.g. Government assistance, Non Governmental Organisations (NGOs) aid, bank credit) when disasters happen. For example, after the 2009 tsunami, remittances augmented income and stayed high in the

long-term when NGOs aid and government support was little. In turn, remittances diminished when affected-households could access sufficient government and NGOs aid to overcome the disaster (Le Dé et al., 2015a). Following cyclone Evan, impacted households could with remittances compensate the losses of agricultural production and limited government and international aid. In both events remittances acted as a safety net, and represented a central strategy in households' attempts to deal with both short-term issues and long-term recovery.

Figure 9.1: Role and impacts of remittances in disaster



*Note:* Fa'alavelave encompass weddings, funerals, elections or bestowing of chiefly (*matai*) titles, and other customary ceremonies. Fa'alavelave are traditional practices and customs at the core of the *fa'aSamoa* (*Samoan way*).



In addition, remittances were generally used in combination with other strategies such as intensifying (e.g. more fishing, more farming, selling of livestock) or diversifying (e.g. looking for jobs, participate in the informal economy) their livelihoods. For those who received less and inconsistent remittances, the livelihood strategies were often less sustainable so people had to modify their livelihoods (e.g. skipping meals, reducing food intake, relying on humanitarian aid, requesting support to neighbours), and migrating temporally or even permanently.

Clearly, receivers of remittances could more easily deal with emergency issues and recover faster than those with little to no access to remittances. Yet, results indicate that remittances may directly or indirectly benefit those who are not recipients. During both the tsunami and cyclone Evan, remittances were shared with those most in need. Remittances were often directed to the reconstruction of housing and re-establishing local productive activities (e.g. small businesses, agricultural production), which tended to stimulate the local economy. Additionally, remittances were used to rebuild or repair churches, as well as used for fa'alavelave and other cultural purposes, thus encouraging the maintenance of tradition and local customs. Indeed, it appeared that remittances benefited the broader community economically and socio-culturally, including the poorest and marginalised groups who generally have limited to no access to this resource.

*Objective 2: To explore the relationship between access to remittances and vulnerability, and investigate the dynamic of this relationship during and after disaster.*

The second thesis objective was to understand differential access to remittances amongst the households of a community, investigate if and how remittances shape poverty and vulnerability, and comprehend the dynamics of these relationships during and after disaster. Findings of this thesis indicate that on a day-to-day basis remittances are not widely accessible to the poorest households of the community who receive few and irregular remittances. Overall results

suggest a correlation between lack of access to remittances and poverty, thus fitting with earlier works by Shankman (1976) and more recently a report from AusAID (Amosa and Samson, 2012). The migration-remittances strategy requires access to certain resources, including strong social networks in the place of destination, sufficient money to fund migration, adequate information, and particular skills to fit with migration schemes (Taylor et al., 2005); these are resources that the poor do not normally have access to. Moreover, results show that poor households generally have fewer migrants living abroad and potentially remitting. Because of their low education level, the poor usually only have access to seasonal employment and/or low skilled jobs in the host country. This often implies that migrants have small wages and thus reduced capacities to send higher and regular remittances.

Results indicate that households with little access to remittances are more vulnerable socially because their transnational networks are weaker than the other members of the community. They are also more vulnerable financially; while middle class households use remittances in a somewhat more sustainable way (e.g. building upgraded housing, paying school fees, developing agriculture), poor households cannot direct remittances to higher-level education, savings, or investments in productive assets, but rather use them to meet basic needs and to comply with socio-cultural obligation within the village (e.g. fa'alavelave, church commitment). Besides, their houses are more vulnerable since reduced remittances access means they cannot afford better quality building materials.

Findings showed that such a vulnerable position was reinforced, or is at least reproduced, when a disaster struck. The failure to claim and utilise remittances during and after disaster can make a significant difference between the households which successfully cope and recover and those who fail to overcome disaster. For example, it might imply using savings, selling leftover food production, changing diet, and having to rely on government and external aid. In addition, the thesis indicates that remittances have indirect effects on households' ability to deal with disaster. Remittances are part of a livelihood system. They interact with and influence other resources in ways that overall

livelihoods and households may become more fragile or stronger (e.g. getting a housing credit, preserving political power, losing social position in society). Hence, the nonexistence of, or limited access to, remittances may aggravate vulnerability existing pre-disaster in different ways (e.g. natural, political and social vulnerability). Results show that the lack of access to remittances may lead to an undesirable and unsustainable livelihood pathway, such as in leading to impoverishment, steady food insecurity, and worsening of vulnerability.

*Objective 3: To evaluate migrants' role during and after disaster, the influence of such an event in their decision to send remittances, and the related impacts on their own lives and livelihoods.*

Thirdly, this thesis aimed to understand the role of migrants during and after disaster, identify the determinants for remitting in such a context and evaluate the impacts it may have on them. Focusing on Samoan migrants living in New Zealand, this thesis indicates that remitters may respond quickly in providing assistance to disaster-affected relatives and provide support on the longer-term recovery. While before disaster migrants tend to remit to the close family (e.g. parents and siblings), during and after disaster they may remit to their extended family (e.g. uncles and cousins), including family members towards whom they have never remitted in the past. Often, they send remittances at village level, also termed 'collective' remittances (Goldring, 2004), generally through churches and local organisations. Results also indicate that during disasters larger 'informal' remittances (e.g. cash and goods) are sent, compared to the more 'formal' (e.g. banking system and money transfer agents) way of sending remittances before disaster.

The thesis identifies that in a disaster context, migrants may remit because of (1) a sense of obligation/responsibility to assist the family, (2) a consciousness of the economic struggles experienced in the home country, and (3) religious ethics. It is suggested that disasters may represent an emotional stimulus for migrants, and that in such a context remitting is a way to express their identity and reaffirm their affection for, and solidarity towards, their relatives and the

broader community of origin. These findings contradict the dominant New Economics of Labour Migration (NELM) co-insurance hypothesis, that sees remitters as rational agents who remit according to a contract and/or for self-interest motives (Brown and Ahlburg, 1999; Rapoport and Docquier, 2006). This thesis finds that remitting in disaster is not necessarily a predetermined strategy and that it cannot be detached from emotional, social and cultural components. Cultural identity, kinship, and the importance of the family within these seem to be the main determinants for Samoan migrants to remit in disaster.

Remitting may imply sending more than the income of the households during the few months following a disaster. This practice may have strong and long-term financial impacts on migrants, often involving reducing daily expenses, using savings, and reallocating or requesting bank loans. The thesis pointed out that remitting might be particularly difficult for migrants who are the sole remitters towards the community of origin and for those who have low-incomes. At the same time, remitting in a disaster context generates positive and more intangible impacts, including strengthening of cultural identity, self-esteem, pride, and overall re-enforcing the ties between the different family members. In addition, the thesis demonstrates that the impacts related to remitting in disaster are not only bilateral (between migrants and the country of origin), but are rather multiple (involving migrants at transnational level). This mechanism involves the exchange of information, organisation, decisions, commitments, and actions between diverse migrants living in diverse countries, thus supporting the notion of transnational community (Basch et al., 1994; Levitt, 1998).

Findings from this thesis have different implications for disaster risk reduction and disaster research. These implications encompass conceptual understanding of remittances as livelihood strategy, methodological approach to assess remittances, and the mainstreaming of remittances in DRR and DM practices. These different aspects are discussed in the following section.

### **9.3 Implications and challenges for disaster risk reduction and disaster research**

#### *9.3.1 Building on remittances for improved DRR and DM: The need for a shift of approach*

The thesis highlights the central role of remittances for many households in their efforts to cope with and recover from disasters. Findings indicate that remittances represent a powerful mechanism both for short-term coping and long-term recovery. The speed at which migrants help their relatives and friends can be very important, especially when external or government assistance takes a long time to reach disaster-impacted people (Deshingkar and Aheeyar, 2006). Besides, the consistency at which remittances are received in the long time frame is one of the strengths of this mechanism (Ratha and Sirkeci, 2010). Remittances also provide the receivers with flexibility of use and thus tend to address their own needs; when sent in the forms of money (e.g. via banking channels and in cash), remittances enable affected people to use them in relation to their priorities. Informal or in-kind remittances generally fit with people's needs since they often come as replacement of lost items (e.g. clothing, kitchenware, construction material, cars, and agricultural tools), usually resulting from communication with remitters during the different post-disaster phases (Le Dé et al., 2015a).

The efficiency of this mechanism contrasts with the conventional DRR and DM practices that tend to consider local people as powerless victims impacted by events that go beyond their control and whose role is limited to aid recipients (Bankoff, 2001; Harrell-Bond et al., 1992; Heijmans, 2004). Current DRR and DM policies and practices mainly rely on the transfer of scientific knowledge from 'developed' countries towards poorer ones and tend to emphasise governments and aid agencies intervention to the detriment of local efforts to face disasters (Bankoff, 2001; Hewitt, 1983; Horst, 2008). Generally, governments and agencies involved in DM focus on people's needs for aid items and make suppositions on their priorities, rather than considering communities' capacities and taking into

account effective local strategies (Heijmans, 2009). Accordingly, DRR and DM measures and actions are generally technical (e.g. new building codes, insurance system, relocation) and frequently are far from local realities (Heijmans, 2001). As a result, responses are often short-term fixes that fail to address the longer-term livelihood recovery challenges faced by affected people (Naik et al., 2007).

Progressively, academics and practitioners have recommended greater involvement of local communities in policy and actions geared towards DRR and DM (Gaillard and Mercer, 2013). Nowadays, it is increasingly recognised that reducing people's vulnerability and fostering development requires strengthening their capacities (Mercer et al., 2007). This implies building on people's knowledge, skills, and the different forms of protection that they have developed to deal with other environmental and social issues. This approach was also stressed in the review of the Yokohama Strategy and used in preparation of the Hyogo Framework for Action (HFA) for the 2005-2015 decade. The review identified the need for "enhanced national and local capabilities to manage and reduce risk" and "involving people in all aspects of disaster risk reduction in their own local communities" (HFA, 2005-2015: 2). Unfortunately, there is still a gap between conceptual discourse and practices (Gaillard and Mercer, 2013; Wisner, 2003).

Yet, a main implication from this thesis is the need for integrating remittances within current policies and actions geared towards DRR and DM. Beyond their financial significance, remittances are a socially and culturally accepted practice that involves kinship relationships (e.g. sons, parents, siblings, and uncles) and is based on norms, emotions, and beliefs (e.g. values of sharing, sense of responsibility towards home, religious principles, love). These elements are often central to the good recovery of local communities (IFRCRCS, 2014). Furthermore, local communities largely see remittances as positive because they engage their own strength rather than some external assistance (Le Dé et al., 2015b). In some way, remittances balance the relationship of power between those who provide aid and those who receive it (Horst, 2008). The argument here is not that remittances should replace governments and NGOs with

migrants becoming the foremost providers of aid. This would be shifting away from the responsibility of governments and international institutions in providing populations with adequate conditions for socio-economic development (De Haas, 2007; Kapur, 2003). Besides, it would be forgetting that the migration-remittances strategy takes place in a vulnerability context, as it is often used in reaction to the lack of employment, low wages, limited social security system, and degradation of environmental, economic and political conditions (Borovnik, 2006; Sagala and Sani, 2014; Ullah et al., 2015). Nonetheless, government bodies and agencies involved in DRR and DM should work together with local populations in finding ways to draw on this mechanism. This certainly entails integrating remittances within post-disaster assessments as well as within relief actions and recovery programmes. Such an approach first requires recognising remittances as local people's capacity. It also implies a shift of approach, from local communities being commonly treated as receivers of DRR and DM programmes, towards more comprehensive practices that integrate local communities as actors of DRR and DM measures and actions (Weichselgartner and Obersteiner, 2002).

Chapter 8 outlines potential measures to include remittances within existing DRR and DM practices. Some of these measures converge with the recommendations made by ODI (Savage and Harvey, 2007b), comprising technical measures to ensure that remittances flow can take place (e.g. restoring communication systems, increasing efforts on documentation and family tracing), taking into account remittances within post-disaster assessments, and the need for aid agencies to consider remittance senders (e.g. lowering sending fees and enabling migrants to come back home during crises). Yet, going a step further from ODI's recommendations that remain limited to the emergency phase, Chapter 8 emphasises the need to include remittances on the longer-term recovery and disaster risk reduction, to build on migrants to improve aid assistance and to focus to a greater extent on vulnerable groups who have no to very limited remittances access (Le Dé et al., 2015c).

Overall, greater consideration of remittances within existing DRR and DM

policies may be beneficial to governments and NGOs in diverse ways. This may include more sustainable and cost-effective actions, such as in better targeting those who are vulnerable, better addressing people's priorities, avoiding duplication of aid, and making a better link between emergency response and livelihood recovery (Le Dé et al., 2015c). Some of the potential outcomes for local communities may encompass better and faster recovery, more sustainable use of remittances, self-esteem and empowerment through greater consideration of their capacities, and ultimately reduction of disaster risks (Horst, 2008; Le Dé et al., 2015b). Of course, integrating remittances within current policies and actions geared towards DRR and DM necessitates knowledge on this strategy in order to know how to build on it. However, relevant information is often lacking, which is discussed next.

### *9.3.2 Bridging the gap between economic knowledge and local perspectives: towards a more participatory approach*

Evaluating how to support remittances requires comprehending the reasons why they are used as livelihood strategy, how significant they are for people, the way they are spent and the consequences of such strategy. Yet, this information is generally missing (Le Dé et al., 2013). The large majority of studies on remittances is done at national, regional or even global scale and adopts economic perspectives (Agarwal and Horowitz, 2002; Amuedo-Dorantes et al., 2010; Balli and Rana, 2015; Le Goff and Salomone, 2015). Existing research is generally based on national data from central banks of states and use econometric methods that are often mixed with questionnaire-based surveys (e.g. Li and Wang, 2015; Walker and Brown, 1995; Yormirzoev and Mittelhammer, 2015). Undoubtedly, economic and large-scale studies provide indispensable information for understanding broader demographic, economic, and political impacts of remittances on countries or certain regions of the world (e.g. 'brain drain' effect, impact on exchange rate and competitiveness, migration fluxes following disasters). However, these studies prove somewhat limited for understanding certain, though central, aspects of remittances in disaster. For example, this dominant approach provides little information on smaller scale



patterns of remittances, such as when a disaster impacts a particular region of a country or a small part of the population. This may obscure significant local disparities in term of access to or reliance upon remittances at village and household level (Savage and Harvey, 2007a), which however might help better appraising vulnerability pre and post-disaster (Le Dé et al., 2015d). Moreover, the utilisation of questionnaire-based surveys, as commonly used in research on remittances, usually involves questions that have been defined according to outsiders' perceptions and criteria. This may lead to large errors in the measurement and comprehension of this mechanism. Besides, the questionnaires might mean little in some local contexts or even exclude those marginalised such as when they involve monetary values and percentages and thus require a certain level of education (Le Dé et al., 2015e).

This dominant research approach to remittances has resulted in that governments and aid agencies, who are aware of remittances as a common strategy to deal with disasters, have a limited comprehension of this mechanism (Deshingkar and Aheeyar, 2006; Savage and Harvey, 2007b). They often have little quantitative (and qualitative) information on remittances at household and village level, thus making it difficult for them to both take this mechanism into account and build on it (Le Dé et al., 2013). On the other hand, local communities are very knowledgeable about aspects related to remittances and disasters, since this mechanism is rooted in their daily life and has direct effects on their livelihoods. However, the dominant methodological approach to assess remittances does not really permit them to contribute to the way remittances could be mainstreamed in DRR and DM policies and practices, nor expressing their views on their own mechanism. Thus, one of the key arguments of this thesis is the need of local people to participate in the production of knowledge on remittances in disaster. A participatory approach may help bridging the gap between current knowledge on remittances, one that is largely based on economic expertise, and local communities' knowledge on this livelihood strategy.

Firstly, the methodological strength of participatory methods may help overcoming difficulties faced by other more conventional methods (e.g. questionnaire-based surveys, econometric calculations) in assessing remittances. Chapter 3 demonstrates that participatory tools can be very effective for measuring different facets of remittances and households' livelihoods. For example, participatory tools might help overcome the problems associated with the measurement of the real flow of remittances that are also sent in the form of goods or through informal channels. They may also help quantify perceptions or values such as the significance of remittances in households' attempts to deal with disaster coping and recovery objectives (Le Dé et al., 2015a). The visual and interactive aspects of participatory activities permit the involvement of a wide range of people within the research process, including those with reduced understanding of economic or scientific concepts as well as people with low levels of formal education or who are innumerate and/or illiterate (Le Dé et al., 2014). Secondly, participatory approaches may equip local populations with tools and information that allow them to debate with local experts and decision-makers on these aspects (Chambers, 2003). This would contribute to foster dialogue between local communities and the relevant stakeholders on how best to mainstream remittances in DRR and DM policies and practices. Furthermore, the involvement of local people in the production of knowledge would potentially lead to a more informed decision-making process and generate more sustainable solutions, including on issues concerning technical measures and actions (Collins and Evans, 2008; Daly et al., 2010). While this means integrating remittances recipients within the research process, it also implies a greater focus on remittances senders, which is examined in the following sub-section.

### *9.3.3 Towards a greater consideration of migrants-remitters*

Appraising migrants' role in a disaster context, including what influences their decision to remit and the implications these elements have on their lives, is indispensable to improve our understanding of remittances and build on this mechanism for DRR and DM. Yet, the migration-remittances nexus is mainly

understood from the perspectives of the country of origin, with little attention paid on migrants (Le Dé et al., 2015b; Lindley, 2008). Most research investigating remitters' behaviour has been based on the NELM theories, which tend to consider migrants as 'satellites' of the original households (Lindley, 2008) and who remit rationally as a contractual arrangement with home (Lianos, 1997). This thesis finds that remitting in disaster is not necessarily a predetermined strategy and that it cannot be detached from emotional, social and cultural components. Cultural identity, kinship, and the importance of the family within these were found to be the main reasons for remitting in disaster, rather than self-interest motives or the obligation to comply with any contractual arrangement. These results fit with studies done in other contexts (Horst, 2008; Lindley, 2009), and overall points out that NELM theories may have conceptual limits such as not being applicable to a disaster context (Le Dé et al., 2015b).

Moreover, this thesis emphasises that migrants play a key role in the strength (or weakness) of remittances mechanism. Migrants may be very fast in responding immediately after a disaster and send important remittances months after such an event. They greatly influence the speed, levels and duration at which remittances are received during both the emergency and recovery phases of disasters. In that sense, they also greatly influence the capacity and vulnerability of remittances receivers in the hazard-affected places. Indeed, there is a need for greater consideration of migrants' remitting role in the disaster context if one wants to understand remittances as strategy to face disasters. In particular, research is required to better appraise the interaction between remittances recipients and senders. Such investigation should go beyond a 'mechanistic' description of connections and links, but rather emphasise the dynamics of these through time and their related impacts.

To date, the large majority of studies have focused on the impacts of remittances on the receiving area, but the impacts that remitting can have on migrants is under-researched (Lindley, 2009; Meyers, 2002). Findings indicate that the efforts made by migrants to remit in a disaster context might have long-term impacts on the vulnerability and capacity of both receivers and senders. For

example, a disaster occurring in a particular area may have important and durable economic repercussions on migrants such as being forced to sell assets and entering into an unsustainable spiral of debt (Le Dé et al., 2015b). It may also imply for migrant workers that they are not able to come back home in order to help the relatives, and have to stay abroad for a longer period than originally planned (IFAD, 2013), thus potentially increasing the vulnerability of those left in the home country. On the other hand, following disasters, remittances may strengthen the identity and ties existing amongst relatives at transnational level. While these impacts are intangible and hardly measurable, their significance to the remitters and receivers should not be underestimated (Hammond, 2011). These elements are empowering and potentially increase people's capacity to face future disasters (Le Dé et al., 2015b).

Furthermore, in an increasingly globalised world, where transnational migration and remittances are becoming more important, assessing vulnerability and capacity with a sole focus on the local / disaster affected area may be less and less relevant, or at least limited. Over the last decades, agencies involved in DRR and DM, NGOs as well as academics have increasingly used the concept of 'community' and advocated the need for community-based approaches (Anderson and Woodrow, 1989; Delica-Willison and Gaillard, 2012; Maskrey, 1989; Pandey and Okazaki, 2005; Shaw et al., 2011; Twigg, 2007). Yet, organisations 'doing' Community Based Disaster Risk Reduction (CBDRR) and Community Based Disaster Management (CBDM) generally see community in terms of geographical place, such as a village or a suburb, where goals are outlined (usually with identified vulnerable groups within such locations), budget allocated, aid receivers identified, and programmes carried out (IFRCRCS, 2014). Thus, as it is argued in the World Disaster Report, "the definition of 'community' that organisations end up with is that it is merely 'where we work'" (IFRCRCS, 2014: 96). Yet, almost fifty years ago Webber (1963) already emphasised the obsolescence of defining communities with a strict place of identification. Since then, different authors have increasingly emphasised that the concept of community may extend beyond a specific geographical area, but also exist at transnational level through the exchange of information, socio-

cultural practices, and the sharing of norms and values (Andersson, 1983; Macpherson and Macpherson, 2009; Schiller et al., 1995; Vertovec, 2001). Drawing on these ideas, this thesis points out that vulnerability and the capacity to deal with disasters might greatly depend on community members residing overseas (Le Dé et al., 2015b). Similarly, disasters may have indirect impacts on such community members living abroad (Le Dé et al., 2015b). Indeed, findings from this thesis suggest that a greater understanding of migrants' decision to remit and the related impacts may help comprehending remittances as livelihood strategy and provide new perspectives on the two key concepts that are vulnerability and capacity.

#### **9.4 Potential thesis limitation**

This thesis utilises participatory methods to appraise different aspects of remittances in disaster. Such an approach provides diverse advantages for gathering qualitative and quantitative data (see Chapter 3). However, using a participatory approach within an academic context presents some limitations in attaining the different goals that participation claims to deliver, including (a) empowering the powerless, (b) initiating changes at policy level, and (c) producing sustainable solutions that fit with local communities' needs. Ideal conditions to deliver these three key-outcomes would imply that the participants have demanded external facilitation, defined the research objectives, designed the research and, based on to their own criteria, outlined indicators of success and assessed the results of the research (Chambers, 1994).

In this thesis, it is the researcher who solicited communities to undertake research. The researcher's need for utilisable information meant collecting consistent and comparable data among the different communities. This required the use of indicators that had been pre-defined by the researcher and were applied in every community. In addition, having to address particular objectives often implied keeping a certain level of control over the participatory process, which substantially reduced the space for creativity of participants. Finally,

writing of the final results was done without the involvement of local people. Hence, these elements significantly limit the space for individual initiatives and voice of participants in the different stages of the research process, and overall largely challenge the capacity of participatory disaster research, when carried out in an academic context, to deliver its three key-objectives.

The limitations described in this sub-section are not confined to this particular thesis, but is likely to be applicable to any academic work, inherently extractive, using a participatory approach (see Chapter 4). These issues are difficult to address but should be carefully considered before, during and after the research. In this thesis, an attempt was made to overcome these limitations through involving community members as facilitators. Training local villagers as facilitators provided critical feedback on how the participatory activities would 'work' with the participants in order to anticipate potential cultural and ethical issues. Moreover, it reduced potential problems of power relationships between the researcher and local people. Ultimately, this approach helped local communities to develop a sense of ownership over the research. Besides, the researcher tried to build strong relationships with local people by spending time living in the villages. While the researcher did the final data analysis, the results from participatory activities were analysed and discussed during the participatory process, but also outside of the 'formal' activities.

The present research was done at a small-scale, since the participatory approach required building strong relationships with local communities, which is usually very time consuming process (Chambers, 1994; Kumar, 2002). Besides, this thesis had limited financial resources and received little support from the Samoan government and local NGOs, which did not permit extending the collection of information at regional or national level (Le Dé et al., 2014). As a result, some of the quantitative results are based on a small sample of households. Thus, statisticians could argue that such small size can be an issue for generalising findings. Moreover, for generating quantitative information, participatory methods are usually perceived as less rigorous and accurate than conventional quantitative techniques (e.g. questionnaire-based surveys,

econometric approaches) (Mayoux and Chambers, 2005). However, many studies have produced precise and generalizable quantitative data via participatory exercises that involve counting, measuring, ranking, scoring, and valuing (Barahona and Levy, 2007; Eldridge, 2001; Shah, 2013). In addition, Mayoux and Chambers (2005) affirm that bigger size of samples that more conventional methods generally use to produce statistically significant results do not necessarily mean better data, but might eventually mean more bad data. With the participatory tools used in this research, the participants went through a process of cross-verification and refinement of the data, to finally reach consensus (Le Dé et al., 2014). This approach and method contribute to precision of the results on remittances (Le Dé et al., 2015e). Furthermore, while the thesis would certainly benefit from additional participatory quantitative data gathered at a larger scale, this small-scale study permitted investigating deeper matter related to remittances and disasters. This led to a greater understanding on vulnerability, capacity and livelihood in relation to remittances, which was only possible following varied discussions, debates, and the multiplication of the participatory activities with the same participants. Other potential advantages from using a small-scale approach include better monitoring of ethics, more empowerment of participants, and lower cost of implementation (Chambers, 2007).

This research on the remittances receiving area was limited to a country case study, namely Samoa, which some may argue is a limitation to the generalization of findings and applicability to other SIDS. However, this study involved five communities (then limited to four communities for the participatory activities) within the country. In addition, the research focused on two different disasters, the 2009 tsunami and 2012 cyclone Evan. While these villages share similarities (e.g. population size, political organisation, economic level), the impacts of the disasters and the response from external aid and governments were different across villages. On one hand, this allowed for comparison of different villages impacted by a similar event. On the other hand, studying two different disasters permitted the analysis of more diverse information (e.g. long-term data versus more short-term information) on the use of remittances in disaster.

Furthermore, information gathered was compared and triangulated with other data from focus group discussions, interviews and the different participatory tools used in the research process. Thus, mixing different methods strengthens the research findings (Jick, 1979), and the focus on one country-case study does not undermine the veracity of the conceptual findings nor applicability to other SIDS (Mercer, 2008).

In fact, findings of this thesis on the importance, functioning and utilisation of remittances in disaster, methodological critique of current research on this mechanism, as well as the related implications for disaster research and policies geared towards DRR are not only applicable to other SIDS but are also relevant at global level. Firstly, studies done in SIDS (Amuedo-Dorantes et al., 2007; Muliaina, 2003) and in other low-income countries (Mohapatra et al., 2009; NRRC, 2014; Wu, 2006) indicate that remittances are becoming increasingly important to overcome disasters. In addition, the reasons for adopting remittances as livelihood strategy, as identified in this thesis (Le Dé et al., 2015d), are likely to be the same in other SIDS (Borovnik, 2006; Connell and Conway, 2000) and low-income countries (Calero et al., 2009; Ullah et al., 2015). Besides, the thesis' results on the utilisation of remittances and impacts on the receiving area fit with other research done at global level (Lindley, 2006; Suleri and Savage, 2006). Similarly, findings on the impacts of remittances on Samoan migrants and their relatives in the disaster-affected country have been suggested in other countries, including Haiti (Lundy, 2011) and Somali (Hammond, 2011; Lindley, 2006). Finally, the policy implications outlined in Chapter 8 are applicable to other SIDS and low-income countries. Surely, more research would be desirable to further investigate and develop some of the conceptual, methodological, and empirical results presented in this thesis.

### **9.5 Needs for future research**

The present research adopted a long-term perspective on remittances. For example, rather than only focusing on their impacts during disaster, an attempt



was made to measure the significance of remittances in people's livelihoods, quantify the utilisation of remittances during 'normal' or pre-disaster years, and investigate how this resource shapes vulnerability before a disaster occurs. In addition, this research looks at the long-term effects of remittances months and even years after the tsunami. Although such a long-term approach provides some insight on how remittances shape vulnerability and capacity of response and recovery, more research is required to understand the link between remittances and disaster risk reduction. In particular, this research could be enriched with a follow-up study exploring the utilisation of remittances and whether they contribute to the prevention of disasters. For example, such a study might investigate the contribution of remittances in providing safer buildings and/or the potential for directing remittances to DRR and DM actions and projects. Certainly, research should include migrants on issues related to raising awareness on disaster risk and safer practices to environmental hazards. Moreover, this research mainly focuses on remittances with established networks between Samoa and overseas. However, remittances can be used as a response to disasters (Naik et al., 2007). Further research on the extent to which disaster-affected households use this strategy and its long-term effects on their livelihoods is required.

This thesis utilises participatory methods to understand remittances in the context of disasters. While providing new data and perspectives on remittances, such an approach needs to be replicated in other contexts and on a larger scale in order to gain further knowledge on the different issues surrounding remittances and disaster. The participatory tools involved in this research are a combination of existing tools or new ones developed to assess remittances. Yet, they may 'work' differently in other contexts and would certainly require modifications, improvements and/or the development of new tools.

Overall, there is a need for disaster research to more systemically and to greater extent involve disaster-affected households and migrants in the production of knowledge. Participation enables exploring deeper matters via discussions based on people's own reality and permits collecting some information that more

conventional approaches cannot gather (Le Dé et al, 2015e). The argument here is not that researches using participatory tools should replace more conventional methods such as questionnaire-based surveys and econometric techniques. It is essential to recognise that participatory techniques do not produce *all* the data needed (Barahona, 2013). Rather, participatory methods are complementary of more traditional methods, which allow capturing relevant information, including on economic, demographic and political effects of remittances at national, regional and global level. Yet, it is essential for research investigating remittances in disaster context to integrate participatory methods with other traditional methods.

This thesis makes different recommendations for mainstreaming remittances within existing policies targeting DRR and DM (see Chapter 8). Such recommendations are on one hand based on the information generated during the participatory process and the feedback provided by remittances' receivers and senders on the strengths, difficulties and challenges linked to remittances in a disaster context. On the other hand, the policy recommendations rely on the existing literature and interviews with government officials, NGOs, and the banking and private sectors. Despite the researcher's efforts to get together these different stakeholders with local communities and thus foster dialogue on how to include remittances in DRR and DM, such an attempt was unsuccessful (Le Dé et al., 2014). Thus, getting together these different actors, who all have their own views and knowledge on remittances in disaster, may lead to better-informed policy recommendations. More specifically, there is a need for policies to take into account national contexts, evolutions in remittance practices, and technologies. For example, remittances transfer through cell phones is more developed and/or booming in some parts of the world. During the 2009 tsunami, transfer of remittances through cell phones was not yet possible in Samoa. While this option was made available when cyclone Evan occurred, this service was still quite new within the country, and more generally in the Pacific region (Dalberg, 2012). However, in countries such as the Philippines, sending money through cell phones is very common (Alampay and Bala, 2009) and thus,

research aiming at including remittances within DRR and DM policies may take into account such specificities.

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## **Appendix A**

### **PARTICIPANT INFORMATION SHEET**

#### **COMMUNITY MEMBERS (SAMOA)**

Project title: Remittances in the face of disasters: Samoa as case study.

Name(s) of Researcher(s): Loic Le Dé

#### **Researcher introduction**

My name is Loic Le Dé, I am a PhD student in Environmental Science at the University of Auckland, New Zealand. My research deals with migration and remittances phenomenon within the context of disaster risk reduction and development.

#### **Project description and invitation**

In this research remittances are understood as the flows of resources, generally gifts and income sent by migrants living overseas (e.g. New Zealand, Australia, U.S.A) to Samoa. While remittances may be significant on a day-to-day basis for many Pacific Island households, this project aims at assessing the role and impact of remittances in people's response to disasters in Samoa.

I would like to invite you to participate in this project and to share your experience in facing and recovering from the tsunami of 2009 and/or cyclone Evan in 2012. The information obtained from this project will be used for the purposes of Doctoral research and possible future academic publications. For those interested in the result of this research, my thesis will be available from the Library of the University of Auckland upon completion at

<http://www.library.auckland.ac.nz>. You may also obtain a copy of the Summary of Results from your community leader.

### **Project Procedures**

The participants to this project will be involved in interviews and focus group discussions. Face to face interviews may last about one hour. Interviews will be carried out in January 2013. Participation in these interviews is voluntary. Participants will have the option not to answer any of the questions. They may withdraw their participation at any time without offering any explanation, and may withdraw their authorisation for the use of information they have provided to the project up to 30 days following the completion of their interview.

Focus groups will include participatory activities such and each participatory exercise will be explained to the participants at the beginning of every focus group discussion. Focus groups will be held between November and December 2013 in sessions of 2 - 3 hours per day, and should involve 4 days per week for each study site. Nevertheless, such schedule aspects will be arranged with the concerned communities. Participation in these focus groups is voluntary. Participants will have the option not to answer any of the questions. Withdrawal of information will not be possible after the focus groups but participants will be allowed to walk out of the activity at any time if they disagree with the process or encounter any conflict with other participants or the researcher. Participation on this workshop implies that the information provided by the participants must not be disclosed outside of the focus group.

There will be no financial compensation for participants to interviews and focus groups. Participants in this research are also entitled to choose English or their local language to use in research activities such as interviews and focus groups.

### **Data storage/retention/destruction/future use**

I will only take written notes during interviews. The information will be stored

in my office at The University of Auckland before being destroyed. All the original materials drawn during the focus groups (timelines, calendars, scoring and ranking sheets, Venn diagrams and participatory maps) will remain within the partner community. Only photographs will be taken to my supervisor office and stored during six years before being destroyed. There will be no audio or visual recording during both interviews and focus groups.

### **Anonymity and Confidentiality**

The information collected during interviews will be kept confidential. Confidentiality cannot be guaranteed to people participating in the focus groups due to the collective nature of the activity. Personal information about participants will be excluded from academic papers and presentations arising from this research and every possible effort will be made to guarantee that the identity of participants remains anonymous unless you give your permission to be identified on the consent form.

### **Contact Details and Approval Wording**

Loic Le Dé, PhD student  
School of Environment  
The University of Auckland  
Private Bag 92019  
Auckland 1142, New Zealand  
Address in Samoa: Tatiana Hotel, Apia

Email: [lled003@aucklanduni.ac.nz](mailto:lled003@aucklanduni.ac.nz)

Tel: + 64 (0) 220926718

Skype ID: l\_ledge

## **Supervisor**

JC Gaillard, PhD  
School of Environment  
The University of Auckland  
Private Bag 92019  
Auckland 1142  
New Zealand

Email: [jc.gaillard@auckland.ac.nz](mailto:jc.gaillard@auckland.ac.nz)  
Tel: +64 (0)9 373 7599 ext. 89679  
Fax: +64 (0)9 373 7434

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 01/10/2012 for (3) years, Reference Number 8524

## **Appendix B**

### **CONSENT FORM FOR COMMUNITY MEMBERS PARTICIPATING IN FOCUS GROUPS**

#### **THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS**

Project title: Remittances in the face of disasters: Samoa as case study

Name of Researcher: Loic Le Dé

I have read the Participant Information Sheet, have understood the nature of the project and why I am participating. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to take part to this research.
  
- I agree that my participation in this research is voluntary.
  
- I understand that I am free to withdraw participation at any time but that information provided during focus groups cannot be withdrawn. If I do decide to withdraw from this study, I will not have to provide a reason.
  
- I understand that I have the option not to answer any of the questions.
  
- I understand that focus groups will be held in sessions of 2 - 3 hours per day, and should involve 4 days per week. Nevertheless, such schedule aspects may be arranged with the concerned communities. I have the right to participate in one, some or all activities.
  
- I understand that only photographs of the outcomes and written notes will be taken by the researcher and that there will be no audio or visual recording



during the focus group discussions.

- I understand that my name will not be used in the research outputs.
- I understand that my participation in this workshop is contingent upon my agreement to not disclose anything discussed during the focus group.
- I agree to keep the discussion during focus group confidential.
- I understand that the information given will be kept in a secure place for a period of six years after research is completed, after which it will be destroyed.
- I understand that I may obtain a copy of the Summary of Results from my Community Leader.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS  
COMMITTEE ON 01/10/2012 FOR (3) YEARS REFERENCE NUMBER 8524

## **Appendix C**

### **PARTICIPANT INFORMATION SHEET**

#### **Key informants**

Project title: Remittances in the face of disasters: Samoa as case study.

Name(s) of Researcher(s): Loic Le Dé

#### **Researcher introduction**

My name is Loic Le Dé, I am a PhD student in Environmental Science at the University of Auckland, New Zealand. My research deals with migration and remittances phenomenon within the context of disaster risk reduction and development.

#### **Project description and invitation**

In this research, remittances are understood as the flows of resources, generally gifts and income sent by migrants living overseas (e.g. New Zealand, Australia, U.S.A) to their country of origin. While remittances may be significant on a day-to-day basis for many Pacific Island households, this project aims at assessing the role and impact of remittances in people's response to disasters in Samoa.

You are invited to participate in this project and to share your experience and expertise in the disaster management and reconstruction phase; however you are under no obligation to accept. The information obtained from this project will be used for the purposes of Doctoral research and possible future academic publications. For those interested in the result of this research, my thesis will be available from the Library of the University of Auckland upon completion at <http://www.library.auckland.ac.nz>.

## **Project Procedures**

Participation to this interview is voluntary. This interview might be audio recorded by means of a digital voice recorder; however recording is optional and will result only with your consent. Even if you agree to being recorded, you may choose to have the recorder turned off at any time. The researcher will later transcribe the recording. This interview would be during work time, unless a time outside of working hours would be more convenient for you. I anticipate that this interview will require approximately 1 hour of your time.

I have obtained permission from your manager and gained his/her assurance that the decision of employees to participate or not participate in this research will not affect their employment status. Participants may decline to answer any specific question and may withdraw from involvement in this research and withdraw their authorisation for the use of information they have provided to the project up to thirty (30) days following the completion of their interview. You are entitled to receive the transcript of your recording for editing by requesting it in the consent form upon 6 weeks after completion of your interview.

There will be no financial compensation for participants to interviews.

## **Data storage/retention/destruction/future use**

To ensure confidentiality of the information provided, the data collected during this research project will be kept in a secure storage in a locked cabinet of university premises. In the case of electronic data they will initially be safeguarded by passwords and then deleted from all computerised storage spaces and hard drives six years after completion of the interview. Interviews transcripts and other hard copies of data will be shredded at the same time.

## **Anonymity and Confidentiality**

All information collected about participants will be kept confidential. Personal information about participants will be excluded from the Doctoral research and possible future academic publication. Every possible effort will be made to ensure that the identity of participants remains anonymous unless they give their permission to be identified on the Consent Form. Although names will not be mentioned in my research, being identified by a generic job title may nonetheless mean that individuals may become identifiable.

### **Contact Details and Approval Wording**

Loic Le Dé, PhD student  
School of Environment  
The University of Auckland  
Private Bag 92019  
Auckland 1142, New Zealand  
Address in Samoa: Tatiana Hotel, Apia  
Address in Fiji: Nadi Bay Hotel, Nadi

Email: [lled003@aucklanduni.ac.nz](mailto:lled003@aucklanduni.ac.nz)

Tel: + 64 (0) 220926718

Skype ID: l\_ledge

### **Supervisor**

JC Gaillard, PhD  
School of Environment  
The University of Auckland  
Private Bag 92019  
Auckland 1142  
New Zealand

Email: [jc.gaillard@auckland.ac.nz](mailto:jc.gaillard@auckland.ac.nz)

Tel: +64 (0)9 373 7599 ext. 89679

Fax: +64 (0)9 373 7434

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 01/10/2012 for (3) years, Reference Number 8524

## Appendix D

### CONSENT FORM FOR KEY INFORMANTS

#### THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Remittances in the face of disasters: Samoa as case study

Name of Researcher: Loic Le Dé

I have read the Participant Information Sheet, 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.

I understand that I may withdraw myself and any information traceable to me from this study during the interviews, or any time within thirty (30) days from the dates of the interview. If I do decide to withdraw from this study, I will not have to provide a reason, and if I choose to do so, any information pertaining to myself will be destroyed. Withdrawal or participation in this study will not affect my employment status or relationship. I understand that my Manager has assured that my participation or non-participation in this research will not affect my relationship with my staff or their employment status.

I understand that the information given will be kept in a secure place for a period of six (6) years, after which it will be destroyed.

I understand that the result of this research will be available from the Library of the University of Auckland upon completion at <http://www.library.auckland.ac.nz>.

- I agree to take part in this research.

- I agree/do not agree for the interview to be audiotaped.
- I wish/do not wish to receive the transcript of my recording for editing.
- I agree/do not agree to my name being used in the research.
- I agree/do not agree to my job title being used in the research. I understand that although I will be identified by my job title, this may nonetheless mean that I become identifiable.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS  
COMMITTEE ON 1/10/2012 FOR (3) YEARS REFERENCE NUMBER 8524

## **Appendix E**

### **PARTICIPANT INFORMATION SHEET**

#### **COMMUNITY MEMBERS (NEW ZEALAND)**

Project title: Remittances in the face of disasters: Samoa as case study.

Name(s) of Researcher(s): Loic Le Dé

#### **Researcher introduction**

My name is Loic Le Dé, I am a PhD student in Environmental Science at the University of Auckland, New Zealand. My research deals with migration and remittances phenomenon within the context of disaster risk reduction and development.

#### **Project description and invitation**

In this research remittances are understood as the flows of resources, generally gifts and income sent by migrants living overseas (e.g. New Zealand, Australia, U.S.A) to Samoa. While remittances may be significant on a day-to-day basis for many Pacific Island households, this project aims at assessing the role and impact of remittances in people's response to disasters in Samoa.

I would like to invite you to participate in this project and to share your experience in facing and recovering from the tsunami of 2009 and/or cyclone Evan in 2012. The information obtained from this project will be used for the purposes of Doctoral research and possible future academic publications. For those interested in the result of this research, my thesis will be available from the Library of the University of Auckland upon completion at



<http://www.library.auckland.ac.nz>. You may also obtain a copy of the Summary of Results from your community leader.

### **Project Procedures**

The participants to this project will be involved in a focus group discussion. The focus group will include participatory activities such and each participatory exercise will be explained to the participants at the beginning of every focus group discussion. The focus group will be held between in December 2014 in a session of 2 - 3 hours. Nevertheless, such schedule aspects will be arranged with the concerned communities. Participation in this focus group is voluntary. Participants will have the option not to answer any of the questions. Withdrawal of information will not be possible after the focus groups but participants will be allowed to walk out of the activity at any time if they disagree with the process or encounter any conflict with other participants or the researcher. Participation on this workshop implies that the information provided by the participants must not be disclosed outside of the focus group.

There will be a financial compensation of 20 NZ dollars in the form of vouchers for participants to the focus groups. Participants in this research are also entitled to choose English or their local language to use in the focus group discussion.

### **Data storage/retention/destruction/future use**

I will only take written notes during the focus group. The information will be stored in my office at The University of Auckland before being destroyed. All the original materials drawn during the focus group (timelines, calendars, scoring and ranking sheets, Venn diagrams and participatory maps) will remain within the partner community. Only photographs will be taken to my supervisor office and stored during six years before being destroyed. There will be no audio or visual recording during the focus group discussion.

## **Anonymity and Confidentiality**

Confidentiality cannot be guaranteed to people participating in the focus group due to the collective nature of the activity. Personal information about participants will be excluded from academic papers and presentations arising from this research and every possible effort will be made to guarantee that the identity of participants remains anonymous unless you give your permission to be identified on the consent form.

## **Contact Details and Approval Wording**

Loic Le Dé, PhD student  
School of Environment  
The University of Auckland  
Private Bag 92019  
Auckland 1142, New Zealand  
Address in Samoa: Tatiana Hotel, Apia

Email: [lled003@aucklanduni.ac.nz](mailto:lled003@aucklanduni.ac.nz)

Tel: + 64 (0) 220926718

Skype ID: l\_ledge

## **Supervisor**

JC Gaillard, PhD  
School of Environment  
The University of Auckland  
Private Bag 92019  
Auckland 1142  
New Zealand

Email: [jc.gaillard@auckland.ac.nz](mailto:jc.gaillard@auckland.ac.nz)

Tel: +64 (0)9 373 7599 ext. 89679

Fax: +64 (0)9 373 7434

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 01/10/2012 for (3) years, Reference Number 8524

## Appendix F

### CONSENT FORM FOR COMMUNITY MEMBERS PARTICIPATING IN FOCUS GROUPS (NEW ZEALAND)

#### THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Remittances in the face of disasters: Samoa as case study

Name of Researcher: Loic Le Dé

I have read the Participant Information Sheet, have understood the nature of the project and why I am participating. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to take part to this research.
- I agree that my participation in this research is voluntary.
- I understand that I am free to withdraw participation at any time but that information provided during focus groups cannot be withdrawn. If I do decide to withdraw from this study, I will not have to provide a reason.
- I understand that I have the option not to answer any of the questions.
- I understand that focus group session will last 2 - 3 hours.
- I understand that only photographs of the outcomes and written notes will be taken by the researcher and that there will be no audio or visual recording during the focus group discussions.
- I understand that my name will not be used in the research outputs.

- I understand that my participation in this workshop is contingent upon my agreement to not disclose anything discussed during the focus group.
- I agree to keep the discussion during focus group confidential.
- I understand that the information given will be kept in a secure place for a period of six years after research is completed, after which it will be destroyed.
- I understand that I may obtain a copy of the Summary of Results from my Community Leader.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS  
COMMITTEE ON 01/10/2012 FOR (3) YEARS REFERENCE NUMBER 8524

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